

Public Notice of Evidentiary Hearing

NPDES Permit No. AS0000019
Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, Tutuila
American Samoa 96799

NPDES Permit No. AS0000027
Samoa Packing Company
Pago Pago, Tutuila
American Samoa 96799

Please Take Notice that on May 12, 1987, the Regional Administrator of the Environmental Protection Agency, Region 9, granted a request for an evidentiary hearing on the issuance to Star-Kist Samoa, Inc. of National Pollutant Discharge Elimination System Permit No. AS0000019 and the issuance to Samoa Packing Company of National Pollutant Discharge Elimination System Permit No. AS0000027.

Two requests for a hearing were filed, as follows:

(1) by Alfred E. Cropley, President and General Manager of Star-Kist Samoa, Inc., P.O. Box 368, Pago Pago, Tutuila, American Samoa 96799, on behalf of Star-Kist Samoa, Inc., and

(2) by Fred H. Avers, Chairman and Chief Executive Officer of Samoa Packing Company, Checkerboard Square, St. Louis, Missouri 63164, on behalf of Samoa Packing Company, a wholly-owned subsidiary of Ralston Purina Company.

On February 3, 1987, EPA, Region 9 issued NPDES Permit No. AS0000027 to Samoa Packing Company for its tuna cannery located in Pago Pago, American Samoa and NPDES Permit No. AS0000019 to Star-Kist Samoa, Inc., for its tuna cannery, also located in Pago Pago, American Samoa (hereinafter sometimes referred to as "Petitioners"). Both canneries discharge production wastes into Pago Pago harbor. Both permits require Petitioners to meet certain interim effluent limitations by March 7, 1988. These interim effluent limitations are based upon either the BCT limits for tuna processing, see 40 C.F.R. S 408 Subpart N, if applicable, or the American Samoa water quality standards. Both permits require compliance with effluent limitations necessary to achieve the American Samoa water quality standards by March 7, 1991. The permits also contain various monitoring requirements designed to gather information about the water quality of Pago Pago Harbor. Star-Kist, in addition, is required to monitor discharges from a storm water outfall running under its property.

The Petitioners requested hearings to challenge, among other issues, the Agency's determinations that (i) six months of barging high strength wastes to the ocean was a sufficient period of time to acquire meaningful data regarding resultant changes in water quality and (ii) EPA is not required to extend the schedule of compliance set forth in the permit merely because such less stringent permit conditions were contained in the American Samoa Government's certification of the permits. An evidentiary hearing has been granted to consider only these issues. Pursuant to 40 C.F.R. S 124.84, I have consolidated Petitioners' hearing requests on the ground that a joint hearing will expedite and simplify consideration of the issues without prejudicing any party.

Any person who would like to participate in the evidentiary hearing must submit a request to be admitted as a party to the hearing within fifteen (15) days after the mailing or publication of this notice, whichever occurs last. The Presiding Officer shall grant requests that meet the requirements of 40 C.F.R. S 124.74 and S 124.76.

Any person who requests to be admitted as a party may propose material issues of fact and law not already raised by the original requesters. However, except when good cause is shown, no such issue can be raised unless said issue was made part of the administrative record in connection with the preparation of or comment on the draft permits.

The terms and conditions of the permits may be changed after the evidentiary hearing. Any person interested in the terms and conditions of the permits must request to be a party in order to preserve any right to appeal or otherwise contest the final administrative decision with respect to the the permits.

A request to become a party to this proceeding must meet the requirements of 40 C.F.R. S 124.74, which include the following:

a) A statement of each legal or factual question alleged to be at issue, and its relevance to the permit decision, together with a designation of the specific factual areas to be adjudicate and the hearing time estimated to be necessary for that adjudication. Information supporting the request or other written documents relied upon to support the request shall be submitted unless they are already part of the administrative record.

b) The name, mailing address and telephone number of the person making the request.

c) A clear and concise factual statement of the nature and scope of the interest of the requester.

d) The names and addresses of all persons whom the requester represents.

(continued next page)

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e) A statement by the requester that, if ordered to do so by the Presiding Officer, the requester shall make available to appear and testify, without cost or expense to any other party the following:

- i) The requester;
- ii) All persons represented by the requester;
- iii) All officers, directors, employees, consultants and agents of the requester and the persons represented by the requester.

f) Specific references to the contested permit conditions, as well as suggested revised or alternative permit conditions which, in the judgement of the requester, would be required to implement the purposes and policies of the Clean Water Act.

g) In the case of challenges to the application of control or treatment technologies identified in the Fact Sheet, identification of the basis for the objection, and the alternative technologies or combination of technologies which the requester believes are necessary to meet the requirements of the Clean Water Act.

h) By reference to the particular contested conditions warranting the stay, identification of permit obligations that are contested or are inseverable from contested conditions and should be stayed if the request is granted.

Reference should be made to 40 C.F.R. Part 124, Subparts A and E for the procedures applicable to the hearing. A copy of the administrative record containing the documents relating to the permit are on file and may be inspected and copied between the hours of 8:00 a.m. and 4:30 p.m. on business days in the Water Management Division, EPA, Region 9, 215 Fremont Street, 5th Floor, San Francisco, California 94105.

The Agency trial staff for this preceeding is composed of the following:

| | |
|--|---|
| Barbara Ettlinger - Office of Regional Counsel, Region 9 | Norman L. Lovelace - Office of Territorial Programs, Region 9 |
| Ann S. Nutt - Office of Regional Counsel, Region 9 | Sheila Wiegman - Office of Territorial Programs, Region 9 |
| Mary Ann Muirhead - Office of Regional Counsel, Region 9 | Susan Cox - Office of Territorial Programs, Region 9 |
| Judith E. Ayres - Regional Administrator, Region 9 | Michael Blum - Water Management Division, Region 9 |
| Frank M. Covington - Deputy Regional Administrator, Region 5 | Patrick Cotter - Water Management Division, Region 9 |
| William H. Pierce - Water Management Division, Region 9 | Philip Oshida - Water Management Division, Region 9 |
| Kenneth D. Greenberg - Water Management Division, Region 9 | Donald Baumgartner - Environmental Research Lab/ORD, |
| Madonna M. Narvaez - Water Management Division, Region 9 | Region 10 |
| Roger Yates - Water Management Division, Region 9 | Andrew Lincott - Water Management Division, Region 9 |
| Patricia Eklund - Water Management Division, Region 9 | Danny Collier - Water Management Division, Region 9 |

The decisional body for this proceeding is composed of the following:

Lee M. Thomas, EPA Administrator
Honorable Gerald Harwood, Chief EPA Administrative Law Judge
Presiding Officer (to be designated)
Judicial Officer (to be designated)

The Regional Hearing Clerk is:

Lorraine Pearson
Office of Regional Counsel
EPA, Region 9
215 Fremont Street
San Francisco, CA 94105

The Regional Hearing Clerk will maintain the official file of the evidentiary hearing. Any data submitted by Petitioners shall be available as part of the administrative record.

Public notice of each of the draft permits was published in the Samoa News on August 29, 1986. Because no one requested a public hearing, no public hearing(s) on the permits were held. Written comments on the permits were solicited and received by EPA.

EPA's contact persons for information about the evidentiary hearing process, the administrative record, the applicable procedures or the Regional Administrator's decision granting the hearing are:

For technical questions:

Madonna Narvaez (W-5-1)
Water Management Division
EPA, Region 9
215 Fremont Street
San Francisco, CA 94105
Phone: (415) 974-7427d

For legal questions:

Barbara Ettlinger (RC)
Office of Regional Counsel
EPA, Region 9
215 Fremont Street
San Francisco, CA 94105
Phone: (415) 974-0712

The date, time and place of the evidentiary hearing will be set by the Presiding Officer.

Please bring the foregoing notice to the attention of all persons who you know would be interested in this matter

Date: May 29, 1987.

Public Notice *of Evidentiary Hearing*

NPDES Permit No. AS0000019
Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, Tutuila
American Samoa 96799

NPDES Permit No. AS0000027
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(continued from previous page)

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ii) All persons represented by the requester;

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h) By reference to the particular contested conditions warranting the stay, identification of permit obligations that are contested or are inseverable from contested conditions and should be stayed if the request is granted.

Reference should be made to 40 C.F.R. Part 124, Subparts A and E for the procedures applicable to the hearing. A copy of the administrative record containing the documents relating to the permit are on file and may be inspected and copied between the hours of 8:00 a.m. and 4:30 p.m. on business days in the Water Management Division, EPA, Region 9, 215 Fremont Street, 5th Floor, San Francisco, California 94105.

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Norman L. Lovelace - Office of Territorial Programs, Region 9
Sheila Wiegman - Office of Territorial Programs, Region 9
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Office of Regional Counsel
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215 Fremont Street
San Francisco, CA 94105

RESPONSE TO PUBLIC COMMENTS

Tuna Cannery Wastewater NPDES Permit No. AS0000019 Star-Kist Samoa

Public notice of EPA's tentative decision to issue this permit was provided in the Samoa News on August 29, 1986. One letter commenting on the proposed permit was received by EPA during the public comment period which closed on October 10, 1986. The comments in this letter were reviewed by EPA and considered in the formulation of the final determination regarding the proposed permit. Our response to the comments which were received is as follows:

Comment: The discharger requested that the authorized discharge at Outfall 002 include the following non-process streams: retort, scrubber, vapor recovery, condenser cooling, and any other non-contact cooling waters. The discharger cited a study which indicated that excess clean water volume impairs the efficiency of the wastewater treatment system.

Response: EPA agrees with the discharger that treatment efficiency may be impaired by the significant volumes of non-process streams. These streams, though, would violate American Samoa water quality standards for temperature. The discharger must first apply for and receive a zone of mixing for discharge of other than stormwater at Outfall 002. Part III.C.b. of the permit includes a reopener clause allowing the permit to be modified should the Government of American Samoa (ASG) grant the request for a zone of mixing. If possible, the permittee may wish to segregate the non-process streams from the process streams, by-passing the treatment plant, but still discharging through Outfall 001.

Comment: The discharger requested that stormwater not be included in Outfall 002, since it is believed that most of the runoff is from the Samoa Packing Company and other sources over which the discharger has little control.

Response: Pursuant to 40 CFR 122.26(a), discharges to the waters of the United States, including stormwater discharges, are required to have a National Pollutant

Discharge Elimination System (NPDES) permit. In general, parking lots are not considered plant-associated areas, and thus are exempt from having to have a NPDES permit. The possibility exists, however, that because of the physical layout of the plant, there is an opportunity for process water to commingle with the stormwater. The permit now requires that the discharger ensure that only stormwater is discharged through Outfall 002. Stormwater runoff from the permittee's facility shall not be contaminated by fish wastes activities, such as plant and dock washdown. This requirement has been established pursuant to 40 CFR 122.44(k)(3), best management practices. In addition, the permit has been revised to require only monitoring and to delete limits at Outfall 002.

Comment: The discharger requested that the requirement to monitor twice yearly for cadmium, chromium, lead, mercury, and zinc be on the "net limitation" basis, since these metals, with the exception of zinc, are not used in the plant.

Response: Even though no limits have been developed for these metals, monitoring is required to determine if limits should be developed. EPA agrees that the discharger should not be responsible for amounts of these metals not contributed by the cannery. Pursuant to 40 CFR 122.45(g)(3), the permit has been changed to require testing of the intake water at a point not influenced by the effluent, as well as testing of the effluent. This additional monitoring is required to determine the discharger's eligibility for credits.

Comment: The discharger requested that the compliance schedule be adjusted to allow for more receiving water monitoring after the segregation and barging of the high strength wastes.

Response: Compliance schedules are granted when necessary to allow compliance as soon as possible with requirements, such as water quality standards, which are issued or revised after recommencement of the discharge. The ASG adopted water quality standards in 1977 which were reviewed and approved in 1981 and in 1984, while the permit became effective in 1978. EPA recognizes that the discharger may need additional time with which to come into compliance with water quality standards. EPA believes, though, that four years is

sufficient time to achieve compliance with water quality standards. Accordingly, the permit has been changed to require compliance with water quality standards in four, instead of three, years.

In addition, six months after completion of segregation and barging of the high strength wastes, the discharger is required to submit a report which evaluates the alternatives for achieving compliance with water quality standards. Upon submission of the report and schedule, EPA will reopen and modify the permit as necessary.

Comment: The ASG requested that the canneries be required to conduct a current monitoring program as part of the alternative selection process required by Part I.B. of the permit.

Response: Pursuant to 40 CFR 124.53 and 40 CFR 124.54, the ASG, in its certification of this permit, included the above condition necessary to certify that the terms and conditions of this permit will assure compliance with American Samoa water quality standards. In addition to the steps outlined in Part I.B. of the permit, a current monitoring program is necessary to evaluate alternate discharge locations. The ASG needs this information before it can approve any alternate discharge location. Accordingly, the permit has been changed to add this monitoring requirement.

RESPONSE TO PUBLIC COMMENTS

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Star-Kist Samoa

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1/28/87
W-1
2/3/87
Thompson
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the requester could not have reasonably anticipated the relevance or materiality of the issue during the comment period. Any request for an evidentiary hearing must be submitted within 33 days from the permit's signature date to Sheila Wiegman (W-1-1) at the above address.

The EPA will issue a decision to grant or deny an evidentiary hearing within 63 days of the permit's signature date. Also, the EPA will routinely deny any evidentiary hearing request which raises only legal issues. Any denial of a request for an evidentiary hearing may be appealed to the Administrator within 30 days of the date of notice of the denial.

If you have any questions regarding the procedures outlined above, please contact Sheila Wiegman of my staff at (415) 974-8270.

Sincerely,

Norman L. Lovelace, Chief
Office of Territorial Programs
Water Management Division

Enclosures

cc: Pati Faiai, Environmental Quality Commission
Jeffrey Naumann, Star-Kist Foods, Inc.
U.S. Army Corps of Engineers, HI
U.S. Dept. of Interior, HI
U.S. Fish and Wildlife Service, HI
U.S. National Marine Fisheries Service, HI

0028



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street
San Francisco, Ca. 94105

In Reply
Refer to: Sheila Wiegman (W-1-1)

0 4 FEB 1987

Albert E. Cropley
President and General Manager
Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, Tutuila
American Samoa 96799

Dear Mr. Cropley:

A National Pollutant Discharge Elimination System (NPDES) permit has been issued to the following discharger:

Star-Kist Samoa, Inc.
NPDES Permit No. AS0000019

The staff at the Environmental Protection Agency (EPA) has reviewed the NPDES permit application for this facility and has prepared a draft permit, in accordance with the Clean Water Act, as amended. The EPA has also published a public notice of its intent to issue a permit to the above discharger. After considering the expressed views of all interested persons and agencies, pertinent Federal statutes and regulations, the EPA, pursuant to 40 CFR 124, has prepared a final permit which does not differ significantly from the draft permit. Changes to the permit are discussed in the enclosed "Response to Comments."

The NPDES permit is hereby issued upon the date of signature and shall become effective 33 days from the date of mailing, unless there is a written request for an evidentiary hearing. Pursuant to 40 CFR 124.76, requests for an evidentiary hearing must state each of the legal or factual questions alleged to be at issue and must demonstrate one of the following for each issue being raised in the hearing request: that the issue was raised during the public comment period; that the issue was not reasonably ascertainable during the public comment period; or

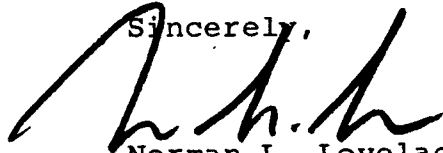
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Water Management Division

Enclosures

cc: Pati Faiai, Environmental Quality Commission
Jeffrey Naumann, Star-Kist Foods, Inc.
U.S. Army Corps of Engineers, HI
U.S. Dept. of Interior, HI
U.S. Fish and Wildlife Service, HI
U.S. National Marine Fisheries Service, HI

P 000 578 596

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982
U.S.G.P.O. 1984-446-014

| | | |
|---|---------------------------|----|
| Sent to | Albert E. Cropley | |
| Street and No. | General Manager | |
| P.O., State and ZIP Code | Star-Kist Samoa | |
| Postage | P.O. Box 368 | \$ |
| Certified Fee | Pago Pago, American Samoa | |
| Special Delivery Fee | Samoa | |
| Restricted Delivery Fee | 96799 | |
| Return Receipt Showing to whom and Date Delivered | | |
| Return receipt showing to whom, Date, and Address of Delivery | | |
| TOTAL Postage and Fees | | \$ |
| Postmark or Date | | |

UNITED STATES POSTAL SERVICE

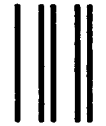
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



PENALTY FOR PRIVATE
USE, \$300

U.S. ENVIRONMENTAL Protection Agency

ATTN: PATRICK CHAN (W-5-1)

(Name of Sender)

215 FREMONT ST.

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

SAN FRANCISCO, CA 94105

(City, State, and ZIP Code)

PS Form 3811, July 1983 447-845
XPDDES PERMIT
DOMESTIC RETURN RECEIPT

| | |
|---|-------------------------------------|
| SENDER: Complete items 1, 2, 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested. | |
| 1. <input checked="" type="checkbox"/> Show to whom, date and address of delivery. 2. <input type="checkbox"/> Restricted Delivery. | |
| 3. Article Addressed to: Albert E. Cropley, Gen. Manager STAR-KIST Samoa Inc. P.O. Box 368 Pago Pago, American Samoa 96799 | |
| 4. Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail | Article Number P000378596 |
| Always obtain signature of addressee <u>or</u> agent and <u>DATE DELIVERED.</u> | |
| 5. Signature - Addressee X | |
| 6. Signature - Agent X <i>[Signature]</i> | |
| 7. Date of Delivery | |
| 8. Addressee's Address (ONLY if requested and fee paid) | |

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UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS



PENALTY FOR PRIVATE
USE, \$300

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- Complete items 1, 2, 3, and 4 on the reverse.
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RETURN
TO



RECEIVED

FEB 11 1987

PERS OFC, EPA HQ

U.S. ENVIRONMENTAL Protection Agency

AHD: PATRICK CHAN (W-F-1)

(Name of Sender)

215 FREMONT ST.

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

SAN FRANCISCO, CA 94105

(City, State, and ZIP Code)

PS Form 3811, July 1983 447-845

NPDZ Permit

DOMESTIC RETURN RECEIPT

| | |
|---|-------------------------------------|
| SENDER: Complete items 1, 2, 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested. | |
| 1. <input checked="" type="checkbox"/> Show to whom, date and address of delivery. | |
| 2. <input type="checkbox"/> Restricted Delivery. | |
| 3. Article Addressed to: Jeffrey Naumann, Manager STAR-Kist Foods, Inc. 180 East Ocean Blvd. Long Beach, CA 90802 | |
| 4. Type of Service: <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail | Article Number 7000578598 |
| Always obtain signature of addressee or agent and <u>DATE DELIVERED.</u> | |
| 5. Signature - Addressee X | |
| 6. Signature - Agent X <i>Robert L. Olman</i> | |
| 7. Date of Delivery 2-9-87 | |
| 8. Addressee's Address (ONLY if requested and fee paid) | |

AZ 0000019

P 000 578 598

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1984-446-014

PS Form 3800, Feb. 1982

| | |
|---|------------------------|
| Sent to | Jeffrey Naumann |
| Street and No. | Manager, Environ. |
| P.O., State and ZIP Code | Engineering |
| Postage | Star-Kists Foods, Inc. |
| Certified Fee | 180 East Ocean Blvd. |
| Special Delivery Fee | Long Beach, CA |
| Restricted Delivery Fee | 90802 |
| Return Receipt Showing to whom and Date Delivered | |
| Return receipt showing to whom, Date, and Address of Delivery | |
| TOTAL Postage and Fees | \$ |
| Postmark or Date | |

In Reply
Refer to: W-5-1

23 SEP 1986

Jeffrey Neumann
Manager, Environmental Engineering
Star-Kist Foods, Incorporated
180 East Ocean Boulevard
Long Beach, California 90802

Dear Mr. Neumann:

The public notice comment period for our proposed action on your application for a National Pollutant Discharge Elimination System (NPDES) permit for

Star-Kist Samoa, Inc.
P.O. Box 358
Pago Pago, American Samoa 96799
NPDES Permit No. AS00000019

has been extended. The public notice comment period will now be open from August 29, 1986 to October 10, 1986. Comments on the proposed action, or a request for a public hearing pursuant to 40 CFR 124.12, must be submitted to this office no later than October 10, 1986. Comments or requests for public hearings should be sent to the above address, attention: Patrick Chan, Permits Record Controller (W-5-1).

If the Regional Administrator finds a significant degree of public interest exists with respect to the proposed permit, a public hearing shall be held. If no hearing is held, we expect to forward the permit containing the final determination of the Regional Administrator shortly after the close of the comment period.

If you have any questions regarding the technical nature of the draft permit, please call Madonna Narvaez at (415) 974-7427.

If you have any questions regarding the administrative procedures of the permit issuance process, please call Danny Collier at (415) 974-7432.

Sincerely,

Frank M. Covington
Director, Water Management Division

cc: David Ballands, Star-Kist Foods,
Pati Faiai, Environmental Quality Commission
U.S. Army Corps of Engineers, HI
U.S. Dept. of Interior, HI
U.S. Fish and Wildlife Service, HI
U.S. National Marine Fisheries Service, HI
U.S. Navy, HI



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX
215 Fremont Street
San Francisco, Ca. 94105

23 SEP 1986

In Reply
Refer to: W-5-1

Dear Interested Party:

The public notice comment period for our proposed action on the applications for National Pollutant Discharge Elimination System (NPDES) permits for the following dischargers

Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799
NPDES Permit No. AS0000019

and

Samoa Packing Company, Inc.
P.O. Box 957
Pago Pago, American Samoa 96799
NPDES Permit No. AS0000027

has been extended. The public notice comment period will now be open from August 29, 1986 to October 10, 1986. Comments on the proposed actions, or a request for a public hearing pursuant to 40 CFR 124.12, must be submitted to this office no later than October 10, 1986. Comments or requests for public hearings should be sent to the above address, attention: Patrick Chan, Permits Record Controller (W-5-1).


If the Regional Administrator finds a significant degree of public interest exists with respect to the proposed permits, a public hearing shall be held. If no hearing is held, we expect to forward the permit containing the final determination of the Regional Administrator shortly after the close of the comment period.

If you have any questions regarding the technical nature of the draft permit, please call Madonna Narvaez at (415) 974-7427.

0029

If you have any questions regarding the administrative procedures of the permit issuance process, please call Danny Collier at (415) 974-7432.

Sincerely,


Frank M. Covington
Director, Water Management Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Return Receipt Requested
Certified Mail: 0416104

21 AUG 1986

Jeffrey R. Naumann
Manager Environmental Engineering
Star-Kist Foods, Inc.
180 East Ocean Blvd.
Long Beach, CA 90802

Dear Mr. Naumann:

Enclosed is a copy of the draft permit, public notice and statement of basis of our proposed action on your application for a National Pollutant Discharge Elimination System (NPDES) permit for:

Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 90802
NPDES Permit No. AS0000019

The public notice comment period will be from August 28, 1986 to September 29, 1986. Comments on the proposed action, or a request for a public hearing pursuant to 40 CFR 124.12, may be submitted to this office within 30 days following the date of this public notice. Comments or requests for public hearings should be sent to the above address, attention: Patrick Chan, Permits Record Controller (W-5-1).

If the Regional Administrator finds a significant degree of public interest exists with respect to the proposed permit, a public hearing shall be held. If no hearing is held, we expect to forward the permit containing the final determinations of the Regional Administrator shortly after the close of the 30-day comment period.

If you have any questions regarding the technical nature of the draft permit, please call Madonna Narvaez at (415) 974-7427.

0031

CONCURRENCES

| | | | | | | | |
|---------|---------|-----------|---------|--|--|--|--|
| SYMBOL | W-5-1 | OTF W-1-1 | OTF/W | | | | |
| SURNAME | Narvaez | Gallier | Lovejoy | | | | |
| DATE | 8/19/86 | 8/19/86 | 8/19/86 | | | | |

If you have any questions regarding the administrative procedures of the permit issuance process, please call Danny Collier at (415) 974-7432.

Sincerely,

Norman L. Lovelace, Chief
Office of Territorial Programs
Water Management Division

Enclosures

cc: David Ballands, Star-Kist Foods,
Pati Faiai, Environmental Quality Commission
U.S. Army Corp of Engineers, HI
U.S. Fish and Wildlife Service, HI
U.S. National Marine Fisheries Service, HI
U.S. Dept. of Interior, HI
U.S. Navy, HI

0032



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX
215 Fremont Street
San Francisco, Ca. 94105

Return Receipt Requested
Certified Mail: 0416104

21 AUG 1986

Jeffrey R. Naumann
Manager Environmental Engineering
Star-Kist Foods, Inc.
180 East Ocean Blvd.
Long Beach, CA 90802

Dear Mr. Naumann:

Enclosed is a copy of the draft permit, public notice and statement of basis of our proposed action on your application for a National Pollutant Discharge Elimination System (NPDES) permit for:

Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 90802
NPDES Permit No. AS0000019

The public notice comment period will be from August 28, 1986 to September 29, 1986. Comments on the proposed action, or a request for a public hearing pursuant to 40 CFR 124.12, may be submitted to this office within 30 days following the date of this public notice. Comments or requests for public hearings should be sent to the above address, attention: Patrick Chan, Permits Record Controller (W-5-1).

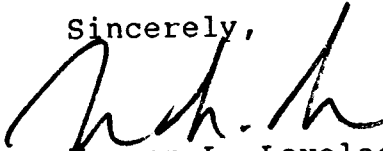
If the Regional Administrator finds a significant degree of public interest exists with respect to the proposed permit, a public hearing shall be held. If no hearing is held, we expect to forward the permit containing the final determinations of the Regional Administrator shortly after the close of the 30-day comment period.

If you have any questions regarding the technical nature of the draft permit, please call Madonna Narvaez at (415) 974-7427.

32A

If you have any questions regarding the administrative procedures of the permit issuance process, please call Danny Collier at (415) 974-7432.

Sincerely,



Norman L. Lovelace, Chief
Office of Territorial Programs
Water Management Division

Enclosures

cc: David Ballands, Star-Kist Foods,
Pati Faiai, Environmental Quality Commission
U.S. Army Corp of Engineers, HI
U.S. Fish and Wildlife Service, HI
U.S. National Marine Fisheries Service, HI
U.S. Dept. of Interior, HI
U.S. Navy, HI

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1984-446-014

PS Form 3800, Feb. 1982

| | | |
|---|-------------------|----|
| Sent to | Albert E. Cropley | |
| Street and No. | Star-Kist Samoa | |
| P.O., State and ZIP Code | P.O. Box 368 | |
| Postage | Pago Pago AS | \$ |
| Certified Fee | 96799 | |
| Special Delivery Fee | | |
| Restricted Delivery Fee | | |
| Return Receipt Showing to whom and Date Delivered | | |
| Return receipt showing to whom, Date, and Address of Delivery | | |
| TOTAL Postage and Fees | | \$ |
| Postmark or Date | August 27, 1986 | |

No.

03263294

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

| | | | |
|-----------------------------|--|---------------------|----|
| SENT TO | | Jeffrey Naumann | |
| STREET AND NO. | | Manager Environ. | |
| P.O., STATE AND ZIP CODE | | Engineering | |
| POSTAGE | | 57AR-KIST Folds | |
| CONSULT POSTMASTER FOR FEES | CERTIFIED FEE | | \$ |
| | SPECIAL DELIVERY | 180 East Ocean Blvd | \$ |
| | RESTRICTED DELIVERY | | \$ |
| | RETURN RECEIPT SERVICE | Long Beach, CA | \$ |
| | SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY | 90802 | \$ |
| | SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY | | \$ |
| | SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY | | \$ |
| TOTAL POSTAGE AND FEES | | \$ | |
| POSTMARK OR DATE | | | |
| August 21, 1986 | | | |

PS Form 3800, Apr. 1976

No.

3410753

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

| | | | |
|-----------------------------|---|---------------------|-------|
| SENT TO | | David Ballands | |
| STREET AND NO. | | General Manager | |
| P.O., STATE AND ZIP CODE | | STAR-KIST Foods | |
| POSTAGE | | 180 East Ocean Blvd | |
| CONSULT POSTMASTER FOR FEES | CERTIFIED FEE | | ¢ |
| | SPECIAL DELIVERY | | ¢ |
| | RESTRICTED DELIVERY | | ¢ |
| | SHOW TO WHOM AND DATE DELIVERED | Long Beach, CA | 90802 |
| | SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY | | ¢ |
| | SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY | | ¢ |
| RETURN RECEIPT SERVICE | SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY | | ¢ |
| TOTAL POSTAGE AND FEES | | \$ | |
| POSTMARK OR DATE | | | |
| August 21, 1986 | | | |

PS Form 3800, Apr. 1976

PS Form 3811, July 1983 447-845

| | |
|--|----------------------------------|
| SENDER:- Complete items 1, 2, 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested. | |
| 1. <input checked="" type="checkbox"/> Show to whom, date and address of delivery. 2. <input type="checkbox"/> Restricted Delivery. | |
| 3. Article Addressed to: <i>Jeffrey R. Naumann, Manager Environ. Engineering STAR-KIST Foods, Inc. 180 East Ocean Blvd. Long Beach, CA 90802</i> | |
| 4. Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail | Article Number <i>0416104</i> |
| Always obtain signature of addressee or agent and <u>DATE DELIVERED.</u> | |
| 5. Signature — Addressee <i>X</i> | |
| 6. Signature — Agent <i>X</i> | |
| 7. Date of Delivery <i>8-25-86</i> | |
| 8. Addressee's Address (<i>ONLY if requested and fee paid</i>) | |

DOMESTIC RETURN RECEIPT

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS



PENALTY FOR PRIVATE
USE, \$300

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



U.S. ENVIRONMENTAL PROTECTION Agency

Attn: PATRICK CHAN (W-5-1)

(Name of Sender)

215 FREMONT ST.

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

SAN FRANCISCO, CA 94105

(City, State, and ZIP Code)

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☒ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:

DAVID BALLANDS, Gen. Manager
STAR-KIST Foods, Inc.
180 EAST Ocean Blvd.
Long Beach, CA 90802

4. Type of Service:

- ☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number

0416258

Always obtain signature of addressee or agent and
DATE DELIVERED.

5. Signature — Addressee

X

6. Signature — Agent

X

7. Date of Delivery

8-25-86

8. Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



PENALTY FOR PRIVATE
USE, \$300

U.S. ENVIRONMENTAL Protection Agency

Attn: PATRICK CHAN (W-5-1)

(Name of Sender)

215 TREMONT ST.

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

SAN FRANCISCO, CA 94105

(City, State, and ZIP Code)

P 017 638 372

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982

* U.S.G.P.O. 1984-446-014

| | |
|--|----|
| Sent to <i>William Kramer</i> | |
| Street and No. | |
| P.O., State and ZIP Code | |
| Postage | \$ |
| Certified Fee | |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to whom and Date Delivered | |
| Return receipt showing to whom, Date, and Address of Delivery | |
| TOTAL Postage and Fees | \$ |
| Postmark or Date <i>21 AUG 1986</i> | |

PS Form 3811, July 1983 447-845

Endanger Species

DOMESTIC RETURN RECEIPT

| | |
|---|-------------------------------------|
| SENDER: Complete items 1, 2, 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested. | |
| 1. <input checked="" type="checkbox"/> Show to whom, date and address of delivery. | |
| 2. <input type="checkbox"/> Restricted Delivery. | |
| 3. Article Addressed to: William KRAMER, Section 7 Coordinator U.S. Fish & Wildlife Service 300 Ala Moana Blvd., Rm 6307 P.O. Box 50167 Honolulu, HI 96850 | |
| 4. Type of Service: <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail | Article Number P017638372 |
| Always obtain signature of addressee <u>or</u> agent and DATE DELIVERED. | |
| 5. Signature - Addressee X <i>Wm Kram</i> | |
| 6. Signature - Agent X | |
| 7. Date of Delivery 8/25/86 | |
| 8. Addressee's Address (ONLY if requested and fee paid) | |

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS



PENALTY FOR PRIVATE
USE, \$300

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



U.S. ENVIRONMENTAL PROTECTION Agency

Attn: PATRICK CHAN (W-5-1)

(Name of Sender)

215 FREMONT ST.

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

SAN FRANCISCO, CA 94105

(City, State, and ZIP Code)

21 AUG 1986

Mr. William Kramer
 Section 7 Coordinator
 U.S. Fish and Wildlife Service
 300 Ala Moana Blvd., Rm. 6307
 P.O. Box 50167
 Honolulu, Hawaii 96858

Dear Mr. Kramer:

As required by Section 7(a)(2) of the Endangered Species Act of 1973, as amended, we are requesting a list of any endangered or threatened species or critical habitats that may be present in the areas affected by our proposal to reissue NPDES permits for the following tuna canneries in American Samoa:

Star-Kist Samoa Inc.
 Samoa Packing Company

Enclosed is a description of the discharges to be permitted, the receiving water conditions, and a draft permit and fact sheet for each facility. The information contained in these documents should help you to assess potential impacts to any endangered or threatened species.

Please notify us of your findings. Should your staff need further information, please have them contact Madonna Narvaez of the Permits and Pretreatment Section at (FTS) 454-7427.

Sincerely,
 Original Signed by:
 Frank M. Covington

Frank M. Covington
 Director, Water Management Division

Enclosures

0033

cc: Norm Lovelace, OTP
 Pati Faiai, AS EOC
 Frank Hackmann, Ralston Purina Co.
 Jeffrey Nauman, Star-Kist

CONCURRENCES

| | | | | | | | | |
|---------|---------|---------|---------|----------------------|---------|--|--|--|
| SYMBOL | W-5-1 | W-5-1 | W-5 | OTP W-1-1 | W | | | |
| SURNAME | Narvaez | Smith | Smith | Collier for Lovelace | W | | | |
| DATE | 8/13/86 | 8/14/86 | 8/14/86 | 8/14/86 | 8/15/86 | | | |

Mr. Eugene Nitta
Protected Species Program Coordinator
Western Pacific Program
National Marine Fisheries Service
P.O. Box 3830
Honolulu, Hawaii 96812

Dear Mr. Nitta:

As required by Section 7(a)(2) of the Endangered Species Act of 1973, as amended, we are requesting a list of any endangered or threatened species or critical habitats that may be present in the areas affected by our proposal to reissue NPDES permits for the following tuna canneries in American Samoa:

Star-Kist Samoa Inc.
Samoa Packing Company

Enclosed is a description of the discharges to be permitted, the receiving water conditions, and a draft permit and fact sheet for each facility. The information contained in these documents should help you to assess potential impacts to any endangered or threatened species.

Please notify us of your findings. Should your staff need further information, please have them contact Madonna Narvaez of the Permits and Pretreatment Section at (PTS) 454-7427.

Sincerely,

Handwritten:
Sincerely,
Frank M. Covington

Frank M. Covington
Director, Water Management Division

Enclosures

cc: Norm Lovelace, OTP
Pati Paiai, AS EQC
Frank Hackmann, Ralston Purina Co.
Jeffrey Nauman, Star-Kist

0034

In Reply Please Refer
to Mail Code: (W-1-1)

21 AUG 1986

Pati Faiai
Executive Secretary
Environmental Quality Commission
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Faiai:

We propose to issue a National Pollutant Discharge Elimination System (NPDES) permit to the following discharger whose application we have determined to be complete:

Star-Kist Samoa Inc.
P.O. Box 368
Pago Pago, American Samoa 96799
NPDES Permit No. AS0000019

Please review the enclosed draft permit and provide us with your certification, or denial of certification, in accordance with 40 CFR 124.53. Your certification should indicate whether the terms and conditions of the proposed permit will result in compliance with the applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the Clean Water Act of 1977 and with appropriate requirements of Territory law. You should also specify any permit conditions which must be made more stringent in order to meet the requirements of the Clean Water Act or Territory law, and any permit conditions which may be made less stringent without violating the requirements of Territory law, including water quality standards. Failure to provide such certification within 60 days from the date the draft permit is mailed shall be deemed a waiver of the right to certify any term or condition which may be established during the EPA permit issuance process.

Comments from interested persons and agencies will be received for a period of thirty (30) days following the public notice. If the response to the public notice indicates a significant degree of public interest in a public hearing, the Regional Administrator shall hold a public hearing in accordance with 40 CFR 124.12. We shall forward to you copies of any comments received by our office which concern certification, and we request that you send to us copies of any comments that you may receive regarding the proposed action.

| CONCURRENCES | | | | | | | |
|--------------|---------|------------|------------|-------------|--|------|--|
| SYMBOL | W-5-1 | W-5-1 | W-5 | OTR W-1-1 | | | |
| SURNAME | Nunwan | Sutherland | Sutherland | Gillier for | | | |
| DATE | 8/13/86 | 8/14/86 | 8/14/86 | 8/15/86 | | 0035 | |

If your staff has any questions regarding the draft permit, they should contact Danny Collier at (415) 974-7432.

Sincerely,

Norman L. Lovelace, Chief
Office of Territorial Programs
Water Management Division

Enclosure

0038

CONCURRENCES

| | | | | | | | |
|---------|--|--|--|--|--|--|--|
| SYMBOL | | | | | | | |
| SURNAME | | | | | | | |
| DATE | | | | | | | |

213 590 3896 P.03
Star-Kist Foods, Inc.

180 EAST OCEAN BOULEVARD
LONG BEACH, CALIFORNIA 90802-4797
(213) 590-7900

October 8, 1986

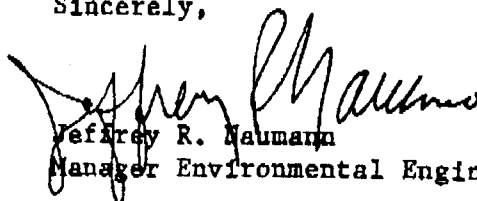
Mr. Norman Lovelace, Chief
Office of Territorial Programs
U. S. Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, CA 94105

Subject: STAR-KIST SAMOA, INC.; NPDES PERMIT RENEWAL

Dear Mr. Lovelace:

Star-Kist Samoa has reviewed the draft permit and is submitting written comments from the plant under the plant General Manager's signature. In order to insure that Star-Kist's comments reach the EPA by the deadline, however, I am hereby transmitting them by facsimile. Please call me at (213) 590-3873 if you should have any questions.

Sincerely,


Jeffrey R. Naumann
Manager Environmental Engineering

JRN/le

cc: Madonna Narvaez ~ EPA IX
Pati Faiai - ASG EQC
A. Cropley

0037

LE3-NLSNP



Star-Kist Foods, Inc.

213 590 3898

P.03

180 EAST OCEAN BOULEVARD
LONG BEACH, CALIFORNIA 90802-4797
(213) 590-7900

October 8, 1986

Mr. Norman Lovelace, Chief
Office of Territorial Programs
U. S. Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, CA 94105

Subject: STAR-KIST SAMOA, INC.; NPDES PERMIT RENEWAL NO. AS0000019,
COMMENTS TO DRAFT PERMIT

Dear Mr. Lovelace:

Star-Kist Samoa, Inc. ("Star-Kist") has reviewed the Draft Permit, and has met with the American Samoa Government and Samoa Packing Co. (SAMPAC) regarding the Samoa Cannery Waste Water study and draft permits, and would offer the following comments relative to that Draft Permit after reflecting upon the agreement which was reached amongst the principals of the waste water study.

Firstly, with regards to the cannery waste water study the following agreement was reached between the ASG and canners:

1. The canners agreed to institute barging of high strength wastes with the DAF sludge within twelve (12) months after the effective date of the permit (EDP).
2. High strength wastes and DAF sludge would be ocean dumped beginning at EDP plus twelve months and continuing throughout the life of the permit. The canners in conjunction with the ASG would agree to continue the harbor monitoring survey on a monthly basis at the nine stations presently monitored, in order to continue the data base for harbor nutrient concentrations. In addition, current meters would be installed in the harbor for continuous current monitoring at the location proposed in the CH₂M-Hill study for a possible deep water outfall in the outer Pago Pago harbor area. Currents would be monitored continuously for a two year period in order to better establish whether that location might be acceptable for an outfall should high strength waste barging not produce water quality in the harbor that is acceptable.

0038

Page 2 of 5

3. At EDP plus three years a six month period would be allowed for the principals (the canners and the ASG) to examine the monitoring data and determine the future course to be followed to achieve compliance with Water Quality Standards: this might be an alternative means of waste disposal, no additional action, minor changes in the water quality standards, etc.
4. After three years and six months after EDP, if it was decided that additional measures must be undertaken to improve water quality, a compliance program to be agreed.
5. The ASG would keep pending the original mixing zone applications.

In view of the historical method of interpreting harbor water quality data during the development of the standards and subsequently, and the action that the principals to the study have agreed upon, we believe that the determination of monitoring data for enforcement purposes, the granting of mixing zones and the possibility of Section 303 should be deferred until the post high strength waste ocean dumping monitoring data is reviewed. The consultant's study indicates that the high strength waste removal will result in substantial improvements in Harbor Water Quality. Keeping the above agreement in mind, we would request that the following detailed changes be implemented in the Draft Permit so that the final permit will match the intended purposes of the American Samoa Government following review of the joint study. Individual comments will be made in the order in which they appear in the Draft Permit:

Page 1

Discharge 002 should include the following non-process streams: retort, scrubber, vapor recovery, condenser cooling and any other non-contact cooling waters. Star-Kist understands that they will apply for a mixing zone to be issued by the American Samoa Government to allow these discharges to be included in outfall 002. Star-Kist and all other canners have similar non-process outfalls for these flows at all facilities, with the exception of Samoa. The additional significant clean water volume impairs treatment efficiency, as was shown in a study made by Star-Kist at its Puerto Rico cannery, so that overall pollutants discharged are reduced after separate non-process diversion due to the greater removal efficiency in treatment of the remaining process wastes. Further, Star-Kist requests that storm water be not included in outfall 002 since much of the storm flow comes from outside of Star-Kist's facility, including hillside and roadway adjacent to the SAMPAC facility for which Star-Kist has no control over volume or quality.

Page 3 of 5.

Page 3, Part I (A)2

Star-Kist requests that the time period for these limitations be changed from "twelve months to three years after EDP" to "twelve months lasting through five years," in order to match the agreement obtained with ASG. The study consultant has recommended that at least a two-year period be given to allow the harbor waters to reach equilibrium after barging of high strength wastes is implemented. In addition, the proposed average and maximum limits for total nitrogen and total phosphorus appear to be reversed for each parameter.

Page 4, Part I (A)(3)

Star-Kist requests that these limits be deleted in that the previous limits contained in I (A)(2) would be continued through EDP plus five years, if the course agreed by the study principals is followed, including the necessary compliance period.

Page 6, Part I (A)(4)

Star-Kist requests that Outfall 002 include only scrubber, retort, vapor recovery, condenser cooling and any other non-contact cooling water. In addition, since much of the storm water that is contributory to the storm drain system does not come from Star-Kist facilities, Star-Kist requests that storm water be excluded from this permit in that Star-Kist has no control over its flow or pollutant concentrations. Further, as Star-Kist will be unable to meet the temperature requirement of 85°F, and possibly the turbidity standard, we would request that a Schedule of Compliance be granted in order to allow the ASG to grant a mixing zone for those parameters.

Page 7, Part I (A)(6)(b) - Toxic Substance Monitoring

Star-Kist requests that monitoring twice yearly for cadmium, chromium, lead, mercury and zinc be on the "net limitation" basis, in that with the exception of zinc, which is present in galvanized equipment used in the cannery, these materials are not used in the facility. Star-Kist would expect that any measureable levels of these heavy metals are likely to be from the intake fresh and sea waters, so that Star-Kist should not be responsible for the amounts of these metals not added by the cannery.

Page 8, Part I (A)(6)(c) - Sediment Monitoring

As mentioned at a recent meeting with EPA in San Francisco, Star-Kist believes that monitoring of harbor bottom sediments near the cannery outfalls and at a reference location in the harbor are meaningless due to the past history of the harbor. Specifically, the canneries are

Page 4 of 5

located adjacent to the Marine Railway, which has sand blasted vessel bottoms containing antifouling paints for many years. The U. S. Navy operated a submarine base during World War II at the location of the canneries. The cannery areas are used for mooring of many vessels throughout the year. Therefore, any contamination of bottom sediments at these locations is much more likely to be attributable to other sources rather than the waste water outfalls. Star-Kist believes that sediment monitoring is not appropriate, and would request that it be deleted from the permit.

Page 9, Part I (B)(1) - Schedule of Compliance

Star-Kist requests that the requirement to submit a report to EPA and the ASG six months after EDP be deleted, since the revised schedule would require review of the harbor water quality after EDP plus three years. During that review period the canners and the ASG would review what further action, in order to attain acceptable harbor water quality, which would be implemented within an agreed compliance schedule.

Page 9, Part I (B)(2)

Star-Kist requests that this paragraph be deleted in that in the proposed course of action the requirements for further action would not be determined until EDP plus three years and six months.

Page 9, Part I (B)(3)

Star-Kist requests that this paragraph be altered to require a Schedule of Compliance that would allow for attainment of any additional action required beyond barging of high strength wastes to be decided at EDP plus three years and six months, after reviewing monitoring data obtained during two years of ocean dumping of high strength wastes.

Page 10, Part I (B)(4)

The Schedule of compliance should be modified as follows:
The Permittee shall:

- a. Achieve compliance with the effluent limits as established in Parts I.A.1, I.A.4, and I.A.5, upon the effective date of this permit.
- b. Achieve compliance with the effluent limits established in Part I.A.2.....(by EDP + 12 months).

Page 5 of 5

- c. Establish with SAMPAC and the ASG current monitoring stations and equipment in the outer harbor that would be potentially acceptable for an outer harbor outfall location should barging of high strength wastes with an inner harbor discharge prove to be unacceptable by.....(by EDP + 12 months).
- d. Commence review of monitoring data obtained in the harbor during the period in which high strength waste is ocean dumped....(by EDP + 3 years).
- e. Complete review of monitoring data obtained during the first three years of the permit.....(by EDP + 3 years and 6 months).
- f. Determine together with SAMPAC and the ASG which further course of action will be necessary to attain water quality in compliance with Water Quality Standards. Develop a Schedule of Compliance that would be approved by both the EPA and ASG to implement the agreed course of action. Upon such approval and notice and opportunity for public comment the permit shall be reopened and modified to include the compliance schedule and the dates necessary to attain acceptable water quality within the scheduled compliance period....(by EDP + 3 years and 6 months).
- g. Achieve compliance with water quality standards within the compliance schedule....(by EDP + 5 years).

Star-Kist Samoa, Inc. appreciates this opportunity to respond to the Draft NPDES Permit which is of the utmost importance to its future operations. If there are any questions regarding our comments please contact Jeff Naumann at Star-Kist Foods, 213 590-3873.

Sincerely,

Albert E. Cropley
President and General Manager
Star-Kist Samoa, Inc.

cc: Madonna Narvaez - EPA IX
Pati Faiai - ASG EQC
Lyle Richmond - ASG EQC
D. Ballands
R. Hetzler
K. Hauge
Frank Hackman - Ralson
LE3-NLSNP

0042



Madonna FYI.

Danny
W-1-1

Star-Kist SAMOA, Inc.

P.O. Box 368 • Pago Pago • TUTUILA ISLAND • AMERICAN SAMOA



September 4, 1986

Mr. Lyle L. Richmond, Chairman
Environmental Quality Commission
American Samoa Government
Pago Pago, American Samoa 96799

Subject: STAR-KIST SAMOA, INC.; REQUEST FOR MIXING ZONE
NON-PROCESS OUTFALL 002, NPDES PERMIT AS0000019

Dear Mr. Richmond:

Star-Kist Samoa, Inc. applied for renewal of its NPDES permit, which included a request for a new outfall to allow for direct discharge of relatively clean water flows presently being sent to the dissolved air flotation (DAF) treatment plant, and which are significantly impairing treatment efficiency due to the volume. Direct discharge of these clean flows will result in an overall decrease in effluent pollutants.

It is our understanding that the EQC is in agreement with allowing this separate non-process discharge providing Star-Kist applies for a mixing zone. Therefore, we would by this letter apply for a zone of mixing for the new discharge. Attached is a completed copy of Form 1 for Outfall 002, as we previously completed for Outfall 001. If any further information is required to complete the mixing zone application please do not hesitate to let us know, or call Jeff Naumann at (213) 590-3873.

Sincerely,

STAR-KIST SAMOA, INC.


ALBERT E. CROPLEY
GENERAL MANAGER

AEC:ptl
atta.

cc: J. Naumann
D. Ballands
R.W. Hetzler
K. Hauge
Norm Lovelace/Danny Collier-EPA IX

0043

FORM 1
INFORMATION NEEDED TO DETERMINE
INITIAL DILUTION FOR SUBMERGED DISCHARGE

The following information is needed to determine the initial dilution which is defined in the 1981 Water Quality Standards as that process which results in the rapid and irreversible turbulent mixing of waste water with ocean water around the point of discharge.

I. Discharger

| | |
|---|--|
| a. Name | <u>Star-Kist Samoa, Inc.</u> |
| b. Address | <u>P. O. Box 368, Pago Pago</u> |
| d. Contact Person & telephone number | <u>Jeffrey R. Naumann</u> <u>(213) 590-3873</u> |

II. Discharge Facilities

| | |
|--|---------------------------|
| a. Submerged outfall (EPA plume model) | |
| 1. Average rate of flow | <u>820 gallons/minute</u> |
| 2. Average port depth at mean tide, feet | <u>Surface</u> |
| 3. Port diameter, feet | <u>1.2</u> |
| 4. Port angle from horizontal, degrees (horizontal = 0, vertical = 90°) | <u>0</u> |
| 5. Number of ports | <u>1</u> |
| 6. Port spacing, feet (if distance between ports varies, -describe fully) | <u>N/A</u> |
| 7. Length of diffuser | <u>0</u> |
| b. Angle of flow to shoreline, degrees (parallel = 0, perpendicular = 90°) | <u>90</u> |

III. Effluent Characteristics

| | |
|-------------------------------------|--|
| a. Temperature, degrees, Fahrenheit | <u>80 - 120°F, variable</u> |
| b. Salinity, mg/l TDS | <u>200 to 33,000, variable</u> <u>(100% seawater to 100%</u> <u>fresh water, but normally</u> <u>a mixture of approximately</u> <u>50/50%)</u> |

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

11 DEC 1986

In Reply
Refer to: W-5-1

Dave Ballands, General Manager
Engineering Can Making Services
Star-Kist Foods, Inc.
180 East Ocean Boulevard
Long Beach, California 90802-4792

Dear Mr. Ballands:

As we discussed in our telephone conversation on December 9, 1986, enclosed is a copy of the American Samoa Government certification for the proposed National Pollutant Discharge Elimination System (NPDES) permit No. AS0000019.

Should you have any further questions, please contact me at (415) 974-8110.

Sincerely,

Original Signed
William H. Pierce

William H. Pierce, Chief
Permits and Compliance Branch

Enclosure

0045

| CONCURRENCES | | | | | | | |
|--------------|--------------|--------------|--------------|--------------|--|--|--|
| SYMBOL | W-5-1 | W-5-1 | W-5-1 | W-5-1 | | | |
| SURNAME | W. H. Pierce | W. H. Pierce | W. H. Pierce | W. H. Pierce | | | |
| DATE | 12-10-86 | 12-10-86 | 12-10-86 | 12-11-86 | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street
San Francisco, Ca. 94105

Jeffrey R. Naumann
Manager, Environmental Engineering
Star-Kist Foods, Incorporated
180 East Ocean Boulevard
Long Beach, California 90802

SUBJECT: DRAFT NPDES PERMIT NO. AS0000019

Dear Mr. Naumann:

Enclosed for your review are copies of portions of the draft National Pollutant Discharge Elimination System (NPDES) permit as well as the fact sheet for this permit. Only Parts I.A., I.B., and Part III of the permit are included with this package. The other parts of the permit have not changed since our meeting on June 12, 1986.

We have reserved 10:00 a.m., Monday, August 11, 1986 for a meeting to discuss the permit should you have any further questions or comments after reviewing the package. Representatives from EPA's Permits and Compliance Branch and Office of Territorial Programs as well as Mr. Pati Faiai of the American Samoa Environmental Quality Council will be available for the meeting.

If you wish to cancel this meeting, or need further information, please contact Madonna Narvaez of the Permits and Pretreatment Section at (415) 974-7427.

Sincerely,

A handwritten signature in cursive script, appearing to read "Will H. Pierce".

William H. Pierce
Chief, Permits and Compliance Branch

Enclosures

2-20

05 AUG 1986

Jeffrey R. Naumann
 Manager, Environmental Engineering
 Star-Kist Foods, Incorporated
 180 East Ocean Boulevard
 Long Beach, California 90802

SUBJECT: DRAFT NPDES PERMIT NO. AS0000019

Dear Mr. Naumann:

Enclosed for your review are copies of portions of the draft National Pollutant Discharge Elimination System (NPDES) permit as well as the fact sheet for this permit. Only Parts I.A., I.B., and Part III of the permit are included with this package. The other parts of the permit have not changed since our meeting on June 12, 1986.

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If you wish to cancel this meeting, or need further information, please contact Madonna Narvaez of the Permits and Pretreatment Section at (415) 974-7427.

Sincerely,

William H. Pierce
 Chief, Permits and Compliance Branch

Enclosures

bcc: Norm Lovelace, OTP

DHL Air Bill No. 35534085

0046

| CONCURRENCES | | | | | | | |
|--------------|---------|-----------|----------|--------|--|--|--|
| SYMBOL | W-5-1 | W-5-1 | OTP/W | W-5 | | | |
| SURNAME | Narvaez | Sutcliffe | Lovelace | IP | | | |
| DATE | 8-5-86 | 8/5/86 | 8/5/86 | 8/5/86 | | | |



Star-Kist Foods, Inc.

NOTE NEW ADDRESS - 180 EAST OCEAN BLVD - LONG BEACH CA 90802

582 TUNA STREET

June 11, 1986 TERMINAL ISLAND, CALIFORNIA 90731

(213) 548-4411

Madonna Narvaez, Water Management Division
Permits & Pretreatment Section
EPA Region IX
215 Fremont Street
San Francisco, CA 94105

Subject: COMMENTS TO PROPOSED DRAFT NPDES PERMIT

Dear Ms. Narvaez:

As the EPA is aware the ASG and the canners are engaged in a joint study with CH₂M Hill of the alternatives for reducing nutrient inputs into Pago Pago Harbor. The final Draft Report has been issued and is due for joint review at a meeting of the Principles in the near future. It is our understanding that ASG has kept EPA aware of the content and development of this study. We therefore believe that the outcome of the study should be reflected in the Permit Requirements and specifically we feel we must object to the inclusion of Permit Parameters and Conditions which this 18 month study has shown to be unobtainable on a practical basis. Therefore our comments in this letter reflect the findings of the CH₂M Hill study.

We have reviewed the Preliminary Draft Fact Sheet and Preliminary Draft NPDES Permit. Following are our comments relative to those documents.

FACT SHEET

Description of Discharge

At the time the application was made for renewal, Star-Kist production averaged about 300 tons of fish per day resulting in a total discharge of 1.44 mgd average. Since that time production has increased to an average of 360 tons per day commonly approaching 400 to 410 tons per day, and is planned to increase to 500 tons within the next year. Consequently waste water flow has also increased so that production day flow is typically 1.8 to 1.9 mgd, and flows in excess of 2.0 mgd are not uncommon. We would request that the Fact Sheet be modified to reflect the increased flow.

Effluent Limitations

1. The proposed interim limits to be met within six months can not realistically be met in that we expect that design and approval for the project to segregate and store high strength waste materials for ocean dumping will take at least three months. We further expect a period of twelve months to be required for ordering of materials, shipment, construction,

and placing the equipment into service. We do not believe this can proceed until the canners, the ASG, the EPA and our consultant agree that ocean dumping of high strength wastes is a reasonable alternative towards attainment of the water quality standards in Pago Harbor. We would request that the time allowed to attain any interim limits be extended to 15 months, assuming that agreement on the study can be reached in the next three months.

Calculation of Effluent Limits

1. Star-Kist Samoa applied for net value credits for some parameters in the application in that we feel they are significant, particularly for direct discharge of non-process wastes, such as scrubber water, retort water, refrigeration cooling water, and other clean streams that have little or no contaminations, typically a net of less than 20 mg/l TSS, BOD, etc. Star-Kist and other canners have been granted permits to allow separate discharge of non-process streams at all our other locations. It is well known that treatment efficiency decreases as the hydraulic loading to a treatment plant increases. Star-Kist has completed a detailed study (attached) of this situation at our Puerto Rico cannery which demonstrates that net discharge of pollutants, such as suspended solids and oil and grease, decreases when low strength wastes are diverted to a separate outfall than if they were sent to the treatment facility, since the additional hydraulic load results in a lower removal rate. Analyses of the non-process flows show that they are very dilute and we feel that the amounts of nitrogen and phosphorus in these streams are not "significant", nor would they contribute to an aggravated violation of water quality standards for those parameters if discharged without treatment. On the contrary, we would argue that separate discharge of the dilute flows would lead to lower overall mass emissions of nitrogen and phosphorus to the harbor than combined treatment of these streams. There would also be a reduction in odors and corrosive effects in the process waste system due to reduced temperature with diversion of the non-process streams to outfall 002. We would therefore request that EPA allow non-process wastes to be diverted to an outfall 002. Since we can not control much of the storm flow contributed to the storm drain we would request that storm water not be monitored by Star-Kist, nor included in this permit.
2. The elevated temperature of some of the non-process streams would not meet water quality standards and would require a temperature mixing zone under present water quality standards. We do not feel that their inclusion in the treatment stream is of any benefit in attainment of water quality standards since the proximity of the two outfalls would have the same effect on ambient water temperature as one combined discharge. We should add that the use of sea water, which is typically 83°F. to 85°F., makes attainment of the proposed 85°F. limitation for process discharge impossible. We would, therefore,

request that the 90°F limit be retained. Even potable water used in the process is relatively warm in American Samoa compared to water temperatures commonly found in the United States.

3. The maximum and monthly average flows listed in the Fact Sheet taken from the Application used data from 1983 through 1984. Current average production day flows are typically 1.8 to 1.9 approaching 2.0 mgd due to the increased production. We would request that the flow figures be updated in the Fact Sheet and draft permit to 1.18 average and 2.0 maximum for process waste after diversion of non-process to outfall 002.

Final Limits Based on Water Quality Standards

1. The CH₂M-Hill study has established that the canners will not be able to meet the harbor water quality standards for nitrogen and phosphorus of 0.2 and 0.03 mg/l, respectively, at the end of the pipe no matter what form of treatment or removal of the wastes is exercised short of total removal of all wastes from Pago Pago Harbor. However, as we mentioned at the May 30 meeting, the water quality standards for oceanic waters are more stringent than those in Pago Harbor, and were not in compliance on the basis of data available, making any waste discharge no more in compliance with the standards than Pago Harbor. The 1979 M & E Pacific survey that was used to develop the water quality standards found that the median of surface samples taken in oceanic waters were not in compliance with the present oceanic water standard for phosphorus and for chlorophyll, and the "not to exceed 10% and 2% standards" were out of compliance for total phosphorus, total nitrogen, and chlorophyll. These samples were taken before ocean dumping of sludge commenced.
2. Star-Kist will not be able to meet the temperature limits of 85°F. maximum, as discussed earlier, and would ask that the 90°F. limit be retained. The pH range of 6.5 to 8.6 is unattainable without addition of caustic chemicals to the effluent to raise the pH from its normal range of 6.0 to 6.5. We therefore ask that reconsideration be given to provide more reasonable temperature and pH limits in the permit and to include the 1% deviation clause.
3. The Fact Sheet states that the permit may be re-opened and modified to include new limits if a zone of mixing is approved by the ASG. However, attainment of a mixing zone in any body of water in American Samoa is exceedingly difficult since any relavent water body does not now meet the standards and could not be used for dilution. So that the water quality standards would need changing in order to obtain any zone of mixing for almost any discharge.

Interim Limits

1. As outlined above, we would therefore ask that the schedule of compliance be expanded to allow fifteen months to meet the interim limits.

Calculation of Interim Limits

1. We would question the applicability of including BOD as a limit in the renewed permit in that the original EPA guidelines included BOD as a parameter but found that after several years of DAF treatment that the technology could not reliably meet the guidelines; and in the late 1970's BOD was dropped as an EPA parameter.
2. The data used in calculating the interim limits for BOD, TN and TP were taken from the permit application, which was written during a time when the cannery was processing an average of 300 tons per day. Presently Star-Kist Samoa is packing up to 400 plus tons per day and plans to be above 450 tons per day, up to 500 tons, within the next year. We would therefore request that the interim limits be upgraded to reflect the increased production at 500 tons rather than the 300 ton level by multiplying the proposed limit by a 500/300 factor, as shown on the attached Appendix B.

Schedule of Compliance

As mentioned above, the CH₂M-Hill study has established that a mixing zone after high strength wastes barging is not attainable, in that the water quality standard formula for determining mixing is too restrictive.

pH

We would request that EPA reconsider its decision to not allow the 1% pH deviation in the permit as mentioned above.

Storm Water Limits

We would request that the limits for storm water be deleted in that a substantial portion of the storm water comes from outside of the plant boundaries, including the public roadway adjacent to the plant and property to the east of Star-Kist since we have little control over the quality of water from those sources.

DRAFT PERMIT

Page 2.

Star-Kist Samoa has operated under a pH limitation of 6.0 to 9.0 since treatment was instituted many years, and has complied more

than 99% of the time. The waste typically has a pH from 6.0 to 7.0. The proposed standards for pH of 6.5 to 8.6 can not be met without chemical addition. In retaining the present BPCT (now equal to BCT) limits for the tuna industry the EPA determined that further pH adjustment was not warranted, and have specified the range of 6.0 to 9.0, which Star-Kist can normally adhere to. We do not feel that addition of caustic chemicals is desirable or necessary to slightly change the pH of the waste water in order to conform the water quality standard. Further, not allowing the 1% deviation from pH to be granted to Star-Kist is not reasonable in that it guarantees that a significant number of violations will occur since no chemical control system is 100% reliable, particularly in an environment such as American Samoa. We would request that we be given a pH range of 6.0 to 9.0. Further, we would ask that the 1% deviation rule be included in any pH limitation.

Page 3.

DAF treatment reliably removes TSS and oil and grease but can do nothing to remove soluble BOD, which is a large proportion of the BOD in tuna cannery waste water. We feel that adding BOD limitations to the permit creates an unnecessary burden that we cannot comply with. You will recall that the original EPA guidelines included BOD as a parameter but found that after several years of DAF treatment that the technology could not reliably meet the guidelines; and in the late 1970's BOD was dropped as an EPA parameter. The other limitation of suspended solids, oil and grease, and possibly total nitrogen and total phosphorus, adequately require Star-Kist to perform treatment as desired by the ASG and EPA. We would therefore ask that BOD be removed as a parameter in this permit. In addition, the proposed limits for nitrogen and phosphorus were based upon the application data in which the plant was processing an average of 300 tons of fish per day. Since that time production has increased to nearly 400 tons and is planned to go to more than 450 tons within the next year. We would therefore, ask that any limitations not based directly on tonnage be increased to reflect 500 tons per day, as shown in Appendix B. As discussed earlier we would request that these limits commence 15 months after the effective date of the permit.

Page 4.

The CH₂M-Hill study has demonstrated that there is a high probability that water quality standards can be met by the removal of high strength wastes and that a mixing zone cannot be achieved for cannery discharges. It proposes a two year monitoring period to establish compliance or otherwise following high strength waste removal. During this time the need for further action by the canners or changes to the water quality standards (as described in Section VI(H) of the Samoa Water Quality Standards) would be evaluated. We therefore believe that specification of further permit limitations is not appropriate at present and therefore request deletion of Page 4. The proposed limits to meet water quality

standards can not be met and will require a mixing zone. These parameters are temperature, total nitrogen, and total phosphorus and pH. The ASG has told us that they will not require a mixing zone if the whole harbor water quality standards are met, which we hope will result from ocean dumping of high strength wastes. Any further requirements for loading reductions beyond the interim limits should be changed to reflect the fact that it will take at least 15 months to begin ocean dumping once agreement is reached between the ASG, EPA and canners. A period of at least two years would then be required to determine whether the interim measures lead to attainment of the water quality standards. Therefore, we would request that the permit limits for nitrogen and phosphorus equal to water quality standards be deleted.

Page 5.

As mentioned for the Fact Sheet the net discharge for pollutants into the harbor will decrease overall with direct discharge of the non-process flows in that the additional hydraulic flow to the DAF due to low strength wastes decreases treatment efficiency which results in a net increase in wastes compared with direct discharge. We have been allowed to direct discharge non-process flows at all other cannery locations and would request that this be allowed in Samoa. We would, therefore, request that the permit limits for outfall 002 be written to include non-process flows reflect net values, and include limitations only for temperature, pH, oil and grease, and turbidity.

Page 6, Paragraph 5(e)(i).

We would request for the reasons given previously that storm water be deleted and the samples of non-process effluent be taken during periods of no rainfall. Star-Kist is a food plant and we would not expect there to be any significant concentrations of heavy metals from its waste water. We would therefore request that requirement to monitor for these materials be deleted.

Page 6, Paragraph 5(e)(ii).

The proposed requirement to monitor bottom sediment near the cannery outfall and at a controlled location for heavy metals seems inappropriate in that we do not expect there to be any heavy metals discharged from the outfalls. As there is a large amount of boat traffic in the harbor, particularly near the dock and marine railway, we would expect to find some heavy metals in that area due to cleaning of the vessel bottoms at the marine railway. We therefore ask that this monitoring requirement be deleted in the permit.

Page 7

Because of the time required to achieve ocean dumping of high strength wastes the schedule of compliance should be changed to reflect the following:

Paragraph B(1)(a) - Some time would be required in order to achieve the pH and temperature limits beyond the effective date of the permit if they can not be altered to make them attainable.

Paragraph B(1)(b) - Ocean dumping of high strength waste will take fifteen months beyond the effective date of the permit.

Paragraph B(1)(c) - This date would move up to fifteen months plus fifteen days.

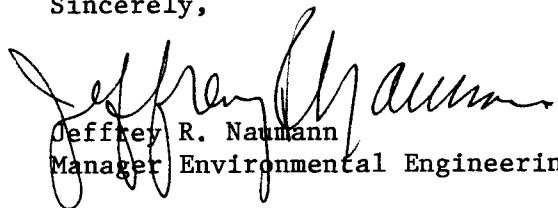
Paragraph B(1)(d) - As mentioned above we would request that the limits in I(A)(3) be deleted from the permit.

Paragraph B(1)(e) - Since these effluent limits are not attainable we would request that this item be deleted from the schedule of compliance.

Paragraph B(1)(f) - The CH₂M-Hill study suggests that harbor water quality will be in compliance after following the canners compliance with the permit limitations in IA(2).

We appreciate this opportunity to address the proposed draft permit and hope our comments are helpful in developing an NPDES permit that is reasonable. Please call me at (213) 590-3873 if you have any questions on our comments.

Sincerely,


Jeffrey R. Naumann
Manager Environmental Engineering

JRN/1e

Attch.

cc: D. Ballands
A. Cropley
R. Hetzler
F. Hackman - Ralston
P. Faiai - ASG
N. Lovelace - EPA

0053

APPENDIX B

STAR-KIST SAMOA, INC. NPDES No. AS0000019
 Calculation of interim limits at 500 tons/day

The proposed draft NPDES permit was written using data from the application, based upon monitoring during 1983-1984. During this period tuna production averaged 300 tons/day. In order to develop a permit for 500 tons/day, the EPA's proposed interim limits should be increased by multiplying them by $500/300 = 1.67$.

| Parameter | EPA Proposed Limits (lb/day) | | Increased for 500 Tons/day (lb/day) | |
|------------------|------------------------------|----------------|-------------------------------------|----------------|
| | <u>Average</u> | <u>Maximum</u> | <u>Average</u> | <u>Maximum</u> |
| BOD | 16,000 | 33,000 | 26,720 | 55,100 |
| Total Nitrogen | 1,300 | 2,600 | 2,171 | 4,342 |
| Total Phosphorus | 260 | 450 | 434 | 751 |

SK CARIBE SCRUBBER - MWTC

The effect on total TSS loading to Mayaguez Bay if SKC's scrubber water is diverted from MWTC to SKC's Outfall 002:

Data from November 1984 through June 1985 at MWTC shows that (1) effluent TSS increases as flow increases; and, (2) that removal efficiency % decreases as flow increases for any given level of solids loading to the DAF treatment system.

Average total influent to MWTC for the period examined (n = 47 days over the period November 1984 - June 1985)

$$Q = 3.490 \text{ mgd}$$

$$\text{TSS} \approx 32,180 \text{ kg/day} = 70,957 \text{ lb/day}$$

Scrubber water from SKC is ~ 300 gpm over 24 hours per day

$$Q = 300 \times 60 \times 24 = 0.432 \text{ mgd}$$

Analyses of SKC's scrubber water shows following:

- | | | | |
|-----|--------------------------------|-----------------|--|
| (1) | Bay water intake TSS = 75 mg/l | (Average, n=15) | |
| (2) | Effluent TSS = 98 mg/l | " " | |
| | Net increase TSS = 23 mg/l | " " | |

Net TSS pickup from scrubbing of dryer gases = $(0.432)(8.34)(23) = 83 \text{ lb/day}$ on average

Examination of TSS removal efficiency vs flow at MWTC, which treats the process waste waters from SKC and other local tuna canners, shows that efficiency decreases as flow increases. At average influent TSS loading of 32,180 kg/day the least squares regression plot yields:

$$\text{Removal} = 1.022 - 0.0292 Q, \text{ where removal is decimal percent, and flow, } Q, \text{ is in mgd.}$$

For a decrease in flow equivalent to diverting the SKC scrubber water ($\sim 0.43 \text{ mgd}$), the change in removal % would be from:

(at 3.49 mgd): $R = 1.022 - 0.0292 (3.49) = 0.9201$, to (at $3.49 - 0.43 = 3.06 \text{ mgd}$):

$$R = 1.022 - 0.0292 (3.06) = 0.9326$$

The expected decrease in TSS from MWTC due to diversion of the SKC scrubber would be:

$$32,180 (0.9326 - 0.9201) = 402 \text{ kg/day} = 887 \text{ lb/day}$$

Therefore, the net decrease in TSS discharged to Mayaguez Bay, after removing the SKC scrubber water, would be:

$$887 - 83 = 804 \text{ lbs/day}$$

MWTC TSS REMOVAL

| DATE | FLOW | INFL. Kg/d | EFFL. (mg/l) | (Kg/d) | REMOVAL % |
|---------|-------|---------------|-----------------|--------|--------------|
| 11/1/84 | 3,882 | 35,163 | 164 | 2407 | 93.2 |
| 11/6 | 2,079 | 10,385 | 188 | 1477 | 85.8 |
| 11/8 | 2,907 | 27,335 | 158 | 1736 | 93.6 |
| 11/13 | 3,547 | 39,336 | 177 | 2373 | 94.0 |
| 11/15 | 3,325 | 26,247 | 252 | 3167 | 87.9 |
| 11/20 | 3,281 | 26,103 | 200 | 2480 | 90.5 |
| 11/21 | 2,050 | 28,915 | 126 | 976 | 96.6 |
| 11/27 | 3,389 | 47,331 | 234 | 2998 | 93.7 |
| 11/29 | 3,688 | 34,653 | 236 | 3290 | 90.5 |
| 12/4 | 3,408 | 38,337 | 196 | 2525 | 93.4 |
| 12/6 | 3,340 | 36,971 | 184 | 2323 | 93.7 |
| 12/11 | 3,488 | 42,148 | 211 | 2782 | 93.4 |
| 12/13 | 3,466 | 28,187 | 144 | 1887 | 93.5 |
| 12/18 | 3,718 | 41,506 | 222 | 3120 | 92.5 |
| 12/20 | 3,073 | 34,336 | 174 | 2021 | 94.1 |
| 1/8/85 | 2,622 | 13,861 | 172 | 1705 | 87.7 |
| 1/10 | 2,619 | 37,285 | 216 | 2138 | 94.3 |
| 1/15 | 3,799 | 32,013 | 274 | 3935 | 87.7 |
| 1/17 | 4,012 | 29,554 | 176 | 2669 | 91.0 |
| 1/22 | 3,467 | 18,180 | 192 | 2516 | 86.2 |
| 1/24 | 3,514 | 32,293 | 177 | 2351 | 92.7 |
| 1/29 | 3,611 | 35,321 | 170 | 2320 | 93.4 |
| 1/31 | 3,619 | 37,100 | 240 | 3283 | 91.2 |
| 2/5 | 3,560 | 41,119 | 176 | 2368 | 94.2 |
| 2/7 | 3,653 | 29,936 | 176 | 2430 | 91.9 |
| 2/12 | 3,336 | 51,219 | 190 | 2396 | 95.3 |
| 2/14 | 3,260 | 31,696 | 172 | 2120 | 93.3 |
| 2/19 | 4,059 | 37,375 | 172 | 2640 | 92.9 |
| 2/21 | 3,934 | 53,394 | 205 | 3048 | 94.3 |
| 2/26 | 3,972 | 38,957 | 178 | 2673 | 93.1 |
| 2/28 | 2,748 | 27,708 | 170 | 1766 | 93.6 |
| 3/5 | 3,790 | 27,382 | 204 | 2880 | 89.5 |
| 3/7 | 2,891 | 36,929 | 252 | 2754 | 92.5 |
| 3/12 | 3,675 | 33,166 | 164 | 2278 | 93.1 |
| 3/14 | 3,535 | 32,793 | 292 | 3902 | 88.1 |
| 3/19 | 3,592 | 20,446 | 238 | 3232 | 84.2 |
| 3/21 | 3,003 | 16,121 | 136 | 1464 | 90.9 |
| 3/26 | 4,196 | 25,885 | 158 | 2506 | 90.3 |
| 3/28 | 3,907 | 33,474 | 170 | 2511 | 92.5 |
| 4/4 | 1,730 | 33,001 | 134 | 876 | 97.3 |
| 4/9 | 3,839 | 31,162 | 234 | 3396 | 89.1 |
| 4/11 | 3,668 | 31,504 | 194 | 2690 | 91.5 |
| 4/16 | 3,706 | 35,976 | 174 | 2437 | 93.2 |
| 4/18 | 3,489 | 22,633 | 115 | 1517 | 93.3 |
| 4/23 | 3,877 | 42,329 | 208 | 3048 | 92.8 |
| 4/25 | 3,958 | 39,142 | 190 | 2843 | 92.7 |
| 4/30 | 3,993 | 27,610 | 152 | 2294 | 91.7 |
| 5/2 | 1,632 | 33,481 | 120 | 740 | 97.8 |
| 5/7 | 4,268 | 34,209 | 173 | 2791 | 91.8 |

(CONTINUED)

0056

(CONTINUED)
MWTC TSS REMOVAL

| DATE | FLOW | INFL. Kg/d | EFFL. (mg/l) | (Kg/d) | REMOVAL % |
|------|-------|---------------|-----------------|--------|--------------|
| 5/9 | 3,964 | 34,061 | 212 | 3177 | 90.7 |
| 5/14 | 4,291 | 26,152 | 156 | 2530 | 90.3 |
| 5/16 | 3,731 | 28,876 | 222 | 3131 | 89.2 |
| 5/21 | 3,582 | 19,743 | 129 | 1747 | 91.2 |
| 5/23 | 3,804 | 27,653 | 166 | 2387 | 91.4 |
| 5/28 | 3,396 | 32,465 | 214 | 2747 | 91.5 |
| 5/30 | 3,499 | 24,603 | 170 | 2249 | 90.9 |
| 6/4 | 2,953 | 33,499 | 167 | 1864 | 94.4 |
| 6/6 | 2,729 | 25,664 | 218 | 2249 | 91.2 |
| 6/11 | 3,705 | 36,520 | 186 | 2605 | 92.7 |
| 6/13 | 3,793 | 22,204 | 138 | 1979 | 91.1 |
| 6/18 | 3,196 | 22,699 | 152 | 1836 | 91.9 |
| 6/20 | 3,757 | 32,479 | 180 | 2670 | 91.8 |
| 6/25 | 4,306 | 25,057 | 172 | 2780 | 88.9 |
| 6/27 | 3,461 | 29,444 | 202 | 2643 | 91.0 |

0057

MWTC TSS REMOVAL
FOR INFLUENT TSS 25,000 to 30,000 KG/DAY , n = 17

| INDEPENDENT VARIABLE | | | DEPENDENT VARIABLE | | | | | |
|----------------------|-------------------|-------------------|--------------------|-------------------|-------------------|--------|--------------------------------|--------------------------------|
| Q(mgd) | | | Removal | | | | | |
| (Xi) | (Xi - \bar{X}) | (Xi) ² | (Yi) | (Yi - \bar{Y}) | (Yi) ² | (XiYi) | (Xi - \bar{X}) ² | (Yi - \bar{Y}) ² |
| 2.907 | -0.607 | 8.451 | 0.936 | 0.023 | 0.876 | 2.721 | 0.368 | 0.00053 |
| 3.325 | -.189 | 11.056 | .879 | -.034 | .773 | 2.923 | .036 | .00116 |
| 3.281 | -.233 | 10.765 | .905 | -.008 | .819 | 2.969 | .054 | .00006 |
| 2.050 | -1.464 | 4.203 | .966 | .503 | .933 | 1.980 | 2.143 | .00281 |
| 3.466 | -.048 | 12.013 | .935 | .022 | .874 | 3.241 | .002 | .00048 |
| 4.012 | .498 | 16.096 | .910 | -.003 | .828 | 3.651 | .248 | .00001 |
| 3.653 | .139 | 13.344 | .919 | .006 | .845 | 3.357 | .019 | .00004 |
| 2.748 | -.766 | 7.552 | .936 | .023 | .876 | 2.572 | .587 | .00053 |
| 3.790 | .276 | 14.364 | .895 | -.018 | .801 | 3.392 | .076 | .00032 |
| 4.196 | .682 | 17.606 | .903 | -.010 | .815 | 3.789 | .465 | .00010 |
| 3.993 | .479 | 15.944 | .917 | .004 | .841 | 3.662 | .229 | .00002 |
| 4.291 | .777 | 18.413 | .903 | -.010 | .815 | 3.875 | .604 | .00010 |
| 3.731 | .217 | 13.920 | .892 | -.021 | .796 | 3.328 | .047 | .00044 |
| 3.804 | .290 | 14.470 | .914 | .001 | .835 | 3.477 | .084 | -0- |
| 2.729 | -.785 | 7.447 | .912 | -.001 | .832 | 2.489 | .616 | -0- |
| 4.306 | .792 | 18.542 | .889 | -.024 | .790 | 3.828 | .627 | .00058 |
| 3.461 | -.053 | 11.979 | .910 | -.003 | .828 | 3.150 | .003 | .00001 |
| Σ 59.746 | | 215.865 | 15.521 | | 14.177 | 54.404 | 6.208 | .00719 |
| \bar{X} = 3.514 | | 12.698 | \bar{Y} = 0.913 | | 0.834 | 3.200 | 0.365 | .00042 |

25,000 - 30,000 kg/day

$$\begin{aligned}\sum (X_i - \bar{X})^2 &= \sum X_i^2 - \frac{(\sum X_i)^2}{k} \\ &= 215.865 - \frac{(59.746)^2}{17} = 5.889\end{aligned}$$

$$\begin{aligned}\sum_{i=1}^{17} (X_i - \bar{X})Y_i &= \sum_{i=1}^{17} X_i Y_i - \frac{\sum X_i \sum Y_i}{k} \\ &= 54.404 - \frac{(59.746)(15.521)}{17} = -0.144\end{aligned}$$

$$b = \frac{\sum (X_i - \bar{X})Y_i}{\sum (X_i - \bar{X})^2} = \frac{-0.144}{5.889} = -$$

$$\begin{aligned}a = \bar{Y} - b \bar{X} &= 0.913 - (-0.0245)(3.514) \\ &= 0.999\end{aligned}$$

$$\text{Removal} = 0.999 - 0.0245 (Q)$$

MWTC TSS REMOVAL
FOR INFLUENT TSS 30,000 to 35,000 KG/DAY , n = 18

| INDEPENDENT VARIABLE Q (mgd) | | DEPENDENT VARIABLE REMOVAL EFFICIENCY | |
|---------------------------------|-------------------|--|---------|
| (Xi) | (Xi) ² | (Yi) | (Xi Yi) |
| 3.688 | 13.601 | 0.905 | 3.338 |
| 3.073 | 9.443 | .941 | 2.892 |
| 3.799 | 14.432 | .877 | 3.332 |
| 3.514 | 12.348 | .927 | 3.257 |
| 3.260 | 10.628 | .933 | 3.042 |
| 3.673 | 13.491 | .931 | 3.420 |
| 3.535 | 12.496 | .881 | 3.114 |
| 3.907 | 15.265 | .925 | 3.614 |
| 4.033 | 16.265 | .922 | 3.718 |
| 1.730 | 2.993 | .973 | 1.683 |
| 3.839 | 14.738 | .891 | 3.421 |
| 3.668 | 13.454 | .915 | 3.356 |
| 1.632 | 2.663 | .978 | 1.596 |
| 4.268 | 18.216 | .918 | 3.918 |
| 3.964 | 15.713 | .907 | 3.595 |
| 3.396 | 11.533 | .915 | 3.107 |
| 2.953 | 8.720 | .944 | 2.788 |
| 3.757 | 14.115 | .918 | 3.449 |
| $\Sigma 61.689$ | 220.114 | $\Sigma 16.601$ | 56.640 |
| $\bar{X} = 3.427$ | 12.229 | $\bar{Y} = 0.922$ | 3.147 |

$$\underline{30,000 - 35,000}$$

$$\begin{aligned}\sum (X_i - \bar{X})^2 &= \sum X_i^2 - \frac{(\sum X_i)^2}{k} = 220,114 - \frac{(61.689)^2}{18} \\ &= 8,696\end{aligned}$$

$$\begin{aligned}\sum (X_i - \bar{X}) Y_i &= \sum X_i Y_i - \frac{\sum X_i \sum Y_i}{k} \\ &= 56,640 - \frac{(61,689)(16,601)}{18} = -0.254\end{aligned}$$

$$b = \frac{\sum (X_i - \bar{X})(Y_i)}{\sum (X_i - \bar{X})^2} = \frac{-0.254}{8.696} = -0.0292$$

$$a = \bar{Y} - b\bar{X} = 0.922 - (-0.0292)(3.427) = 1.022$$

$$\text{Removal} = 1.022 - 0.0292 Q$$

MWTC TSS REMOVAL
FOR INFLUENT TSS 35,000 TO 40,000 KG/DAY , n = 12

| INDEPENDENT VARIABLE | | DEPENDENT VARIABLE | |
|----------------------|-------------------|--------------------|--------|
| Q (mgd) | | REMOVAL EFFICIENCY | |
| (Xi) | (Xi) ² | (Yi) | Xi Yi |
| 3.882 | 15.070 | 0.932 | 3.618 |
| 3.547 | 12.581 | .940 | 3.334 |
| 3.408 | 11.614 | .934 | 3.183 |
| 3.340 | 11.156 | .937 | 3.130 |
| 2.619 | 6.859 | .943 | 2.470 |
| 3.611 | 13.039 | .934 | 3.373 |
| 3.619 | 13.097 | .912 | 3.301 |
| 4.059 | 16.475 | .929 | 3.771 |
| 3.972 | 15.777 | .931 | 3.698 |
| 2.891 | 8.358 | .925 | 2.674 |
| 3.706 | 13.734 | .932 | 3.454 |
| 3.958 | 15.666 | .927 | 3.669 |
| Σ 42.612 | 153.426 | Σ 11.176 | 39.675 |
| $\bar{X} = 3.551$ | 12.786 | $\bar{Y} = 0.931$ | 3.306 |

35,000 - 40,000 kg/day

$$\begin{aligned}\sum (X_i - \bar{X})^2 &= \sum X_i^2 - \frac{(\sum X_i)^2}{k} = 153,426 - \frac{(42,612)^2}{12} \\ &= 2,111\end{aligned}$$

$$\begin{aligned}\sum (X_i - \bar{X})Y_i &= \sum X_i Y_i - \frac{\sum X_i \sum Y_i}{k} \\ &= 39.675 - \frac{(42.612)(11.176)}{12} = 0.0110\end{aligned}$$

$$b = \frac{\sum (X_i - \bar{X})Y_i}{\sum (X_i - \bar{X})^2} = \frac{-0.0110}{2.11} = -0.0052$$

$$\begin{aligned}a = \bar{Y} - b\bar{X} &= 0.931 - (-0.0052)(3.551) = 0.9495 \\ \text{Removal} &= 0.9495 - 0.0052 Q\end{aligned}$$

MWTC TSS REMOVAL %
VS FLOW
NOV. 1984 - JUNE 1985
(INFLUENT LOADING 25,000-30,000 kg/
DAY)

46 0782

10 X 10 TO THE INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

Plant Flow - Q, mgd

4.5

4.0

3.5

3.0

2.5

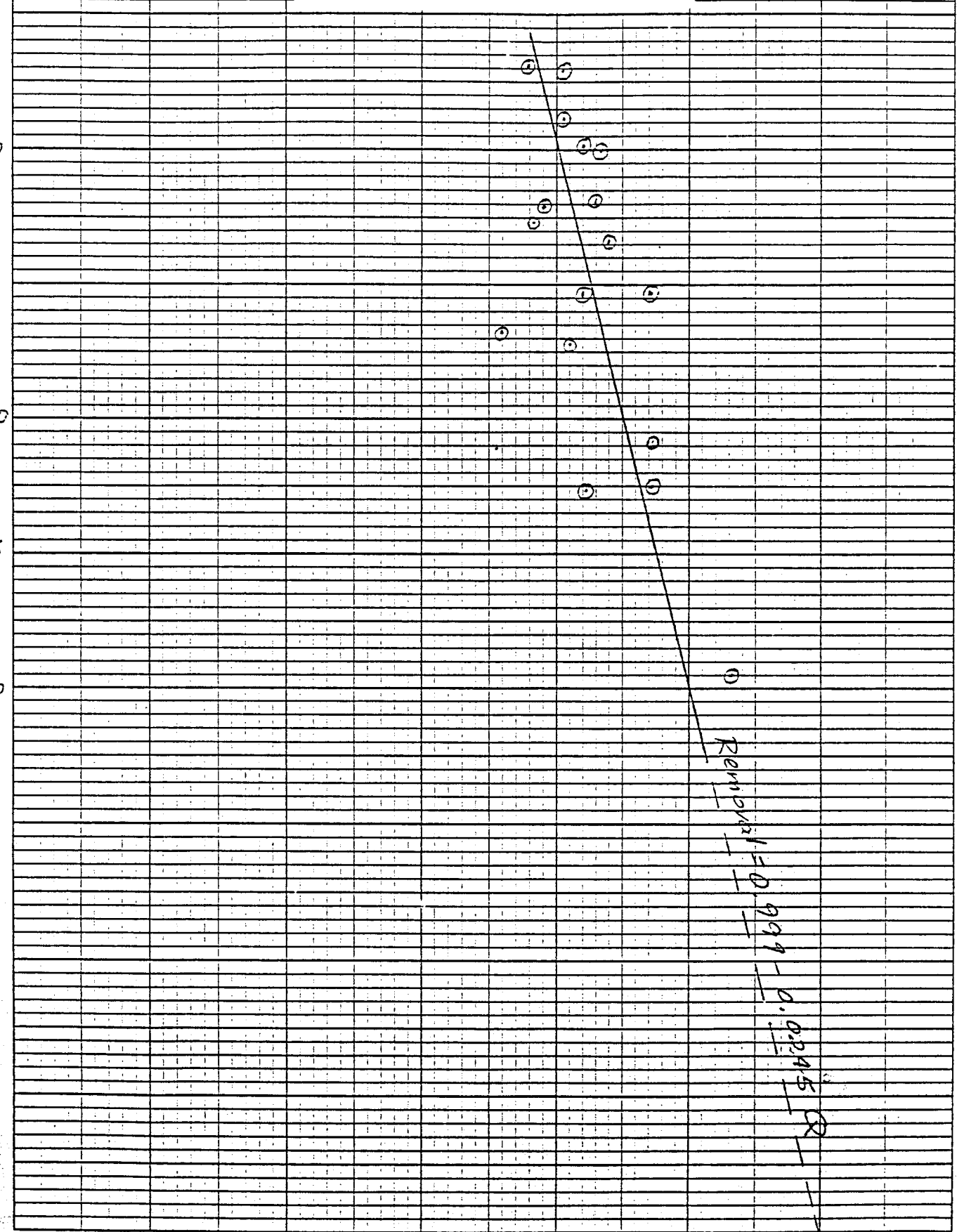
2.0

1.5

1.0

0.5

0



Removal = 0.999 - 0.0245 Q

0064

TSS Removal %

MWTC TSS REMOVAL % VS. FLOW
 NOV. 1984 - JUNE 1985
 (INFLUENT LOADING 30,000-35,000 kg/
 DAY)

46 0782

11.5 10 X 10 TO THE INCHES
 KEUFEL & LESSER CO. MADE IN U.S.A.

Plant Flow - Q, mgd

4.5

4.0

3.5

3.0

2.5

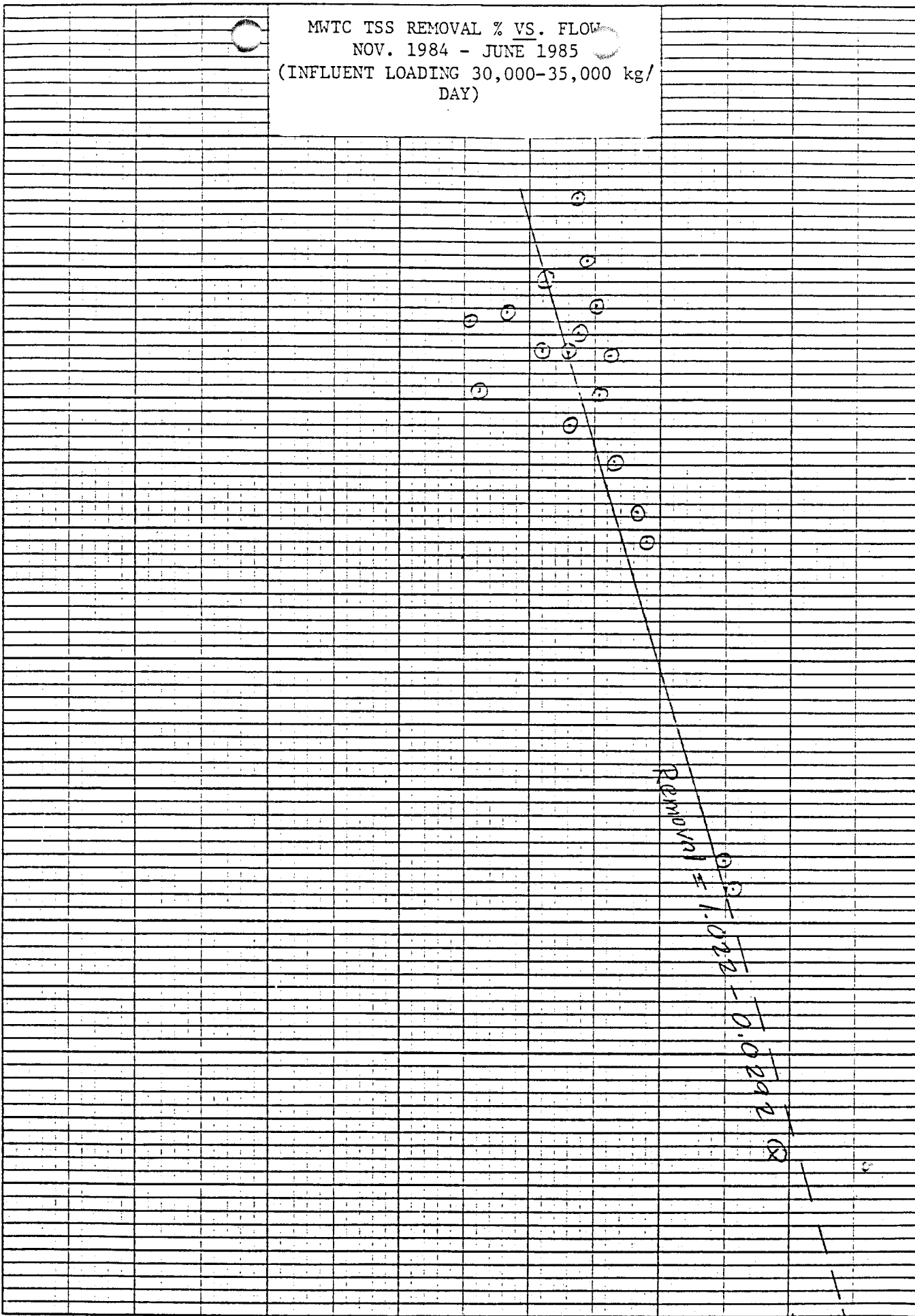
2.0

1.5

1.0

0.5

0



TSS Removal %

0065

MWTC TSS REMOVAL % VS FLOW
 NOV. 1984 - JUNE 1985
 (INFLUENT LOADING 35,000-40,000 kg/
 DAY)

16 0/82

Plant Flow - Q, mgd ^{2.0} ^{2.5} ^{3.0}

Plant Flow - ϕ , mgs

$$\text{Renormal} = 0.9495 - 0.0052 \alpha$$

| 80 | 85 | 90 | 95 | 006300 |
|----------------|----|----|----|--------|
| TSS Removal, % | | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

Jeffrey R. Naumann
Manager, Environmental Engineering
Star-Kist Foods, Incorporated
180 East Ocean Boulevard
Long Beach, California 90802

29 MAY 1986

SUBJECT: MEETING TO DISCUSS PERMITS FOR AMERICAN SAMOA AND
PRELIMINARY ISSUES FOR TERMINAL ISLAND, CALIFORNIA

Dear Mr. Naumann:

In preparation for our meeting on Friday, May 30, I am enclosing copies of the draft Ocean Dumping Permit and the draft National Pollution Discharge Elimination System Permit for your review. Representatives from EPA's Permits and Compliance Branch and the Office of Territorial Programs, as well as Mr. Frank Hackman of the Ralston Purina Company, will be at the 10:00 am meeting.

We will be discussing the relationship between the two American Samoa permits and the clean up of Pago Pago Harbor, specific factors related to each permit, and a time frame for permit issuance.

We will meet with you and Mr. Ballands at 1:30 pm to discuss preliminary issues on a possible monitoring program and the preparation of an ocean disposal site designation environmental impact statement for Star-Kist's operations at Terminal Island, California. You will be meeting with Ms. Patricia Eklund, Mr. Patrick Cotter of the Oceans and Estuaries Section and Mr. Paul Helliker of the California Branch.

We are looking forward to very productive meetings on both subjects.

Sincerely,

William H. Pierce
William H. Pierce
Chief, Permits and Compliance Branch

Enclosures

0067



Star-Kist SAMOA, Inc.



P.O. Box 368 • Pago Pago • TUTUILA ISLAND • AMERICAN SAMOA

July 17, 1985

Norman L. Lovelace
Office of Territorial Programs
Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, California 94105

Subject: NPDES Permit Renewal Star-Kist Samoa AS0000019

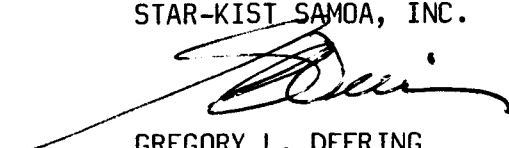
Dear Mr. Lovelace:

Star-Kist Samoa, Inc. is forwarding to you the official "hard copy" Analysis Report by AECOS Laboratory in Honolulu on the DAF Effluent samples in compliance with the subject Permit Renewal Requirements. This data was supplied earlier in a letter dated May 13, 1985.

Thank you.

Very truly yours,

STAR-KIST SAMOA, INC.



GREGORY L. DEERING
General Manager

GLD:tsl

cc: Jeff Naumann

0068



AECOS

970 N. Kalaheo Avenue, Suite A300 • Kailua, Hawaii 96734
Telephone: (808) 254-5884

JOB NO.

729

DATE

5/8/85

PAGE

1 of 1

LABORATORY ANALYSIS REPORT

TO: STARKIST SAMOA, INC.

ATTN: Mr. Mark Anthony

SAMPLES OF: Effluent Water
RECEIPT DATE: 4/20/85

SAMPLED:
LOG NO.: 440 - 443

| ANALYSIS DATE | | | | | | |
|-------------------------|--------|------------------|-----|--|--|--|
| Sample ID | VALUE | DATE OF ANALYSIS | | | | |
| Measurement (units)mg/l | | | | | | |
| SULFITE | 46.0 | 4/21 | dws | | | |
| SULFIDE | 11.7 | 4/23 | 1f | | | |
| SULFATE | 1150.0 | 4/25 | 1f | | | |
| ALUMINUM | 0.77 | 4/29 | bc | | | |
| CHROMIUM | 0.03 | 4/29 | bc | | | |
| ZINC | 0.195 | 4/29 | bc | | | |
| IRON | 0.65 | 4/29 | bc | | | |
| SURFACTANTS | 1.59 | 4/30 | 1f | | | |
| FLUORIDE | 1.12 | 5/6 | 1f | | | |

REMARKS:

Samples preserved and analyzed in accordance with Methods for Chemical Analysis of Water and Wastes, EPA 600/479-020

0069



Star-Kist SAMOA, Inc.



P.O. Box 368 • Pago Pago • TUTUILA ISLAND • AMERICAN SAMOA

RECEIVED
U.S. ENV.
REGION
COMM. OFFICE

July 12, 1985 '85 JUL 22 P1:07

Regional Administrator
U. S. Environmental Protection
Agency
215 Fremont Street
San Francisco, California 94105
Attn: Water Branch, E-5

Environmental Quality Commission
American Samoa Government
Tutuila, American Samoa 96799

Dear Sirs:

Following are the results of analysis conducted to fulfill Special Condition Paragraph 9A Monitoring Requirements for Dumping Permit OD79-01/02 Special for the period April 1st through June 30th. The previous quarterly report was submitted April 1985.

| | |
|-------------------------|-------------------|
| PH | 6.2 |
| Bulk Density | 0.91 |
| Total Suspended Solid | 76,700.0 Mg/Lit. |
| Total Phosphorus | 1,342.0 Mg/Lit. |
| Total Kjeldahl Nitrogen | 578.2 Mg/Lit. |
| B.O.D ₅ | 137,866.7 Mg/Lit. |
| Oil and Grease | 18,997.3 Mg/Lit. |

Sincerely,

STAR-KIST SAMOA, INC.


G. L. DEERING
General Manager

/tsl

cc: R. Hancock
C. Johnson
J. Naumann

0070



Star-Kist SAMOA, Inc.



P.O. Box 368 • Pago Pago • TUTUILA ISLAND • AMERICAN SAMOA

July 12, 1985

Regional Administrator
U. S. Environmental Protection
Agency
215 Fremont Street
San Francisco, California 94105
Attn: Water Branch, E-5

Commander (MEP)
14th U. S. Coast Guard District
PJKK Federal Building
300 Ala Moana, Honolulu
Hawaii 96850

Environmental Quality Commission
American Samoa Government
Tutuila Island
American Samoa 96799

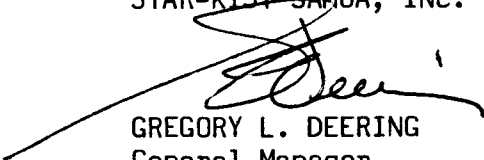
Dear Sirs:

The following volume of sludge was removed from the Star-Kist facility during April 1st to June 30th dumping period and is reported as required by Paragraph 8 Special Conditions Ocean Dumping Permit No. OD79-01/02 Special.

| | |
|---------|--------------|
| GALLONS | 1,844,803.00 |
| TONS | 7,483.66 |

Sincerely,

STAR-KIST SAMOA, INC.


GREGORY L. DEERING
General Manager

GLD:tsl

cc: R. Hancock
C. Johnson
J. Naumann

0071

ISLAND SHIPPING AGENCY

July 08, 1985

STAR KIST SAMOA, INC
PAGO PAGO
AMERICAN SAMOA, 96799

Dear Sirs,

Please be advised that the summary stated below is for the
SLUDGE DUMPING PERIOD APRIL 30 -- JUNE 30, 1985, by the vessel
AZUMA MARU.

Copies are attached for your perusal.

SUMMARY:

STAR KIST SAMOA, INC. (GALLONS)

| | |
|-----------------|-------------------|
| APRIL 1985***** | 663,856 |
| MAY 1985***** | 652,947 |
| JUNE 1985***** | <u>528,000</u> |
| TOTAL | 1,844,803 GALLONS |

SAMOA PACKING, INC. (GALLONS)

| | |
|-----------------|-----------------|
| APRIL 1985***** | 271,943 |
| MAY 1985***** | 228,170 |
| JUNE 1985***** | <u>226,615</u> |
| TOTAL | 726,728 GALLONS |

TOTAL HAULED FOR THE PERIOD APRIL-JUNE, 1985 IS 2,571,531 GALLONS.

Sincerely,


LORITA CRICHTON
AZUMA MARU AGENT.

0072

Samoa Coliform sample results Miliyore filter

dilutions
Coliform $\Rightarrow 100:1$
 $\Rightarrow 2700$

100:1

127000

100,000:1

270,000

Total 7×100

$2 \times 10,000$

$1 \times 100,000$

See ~~below~~ LA results

CA 000000

LA

CA 000000

LA

report is high for a hot
spring water, not sea water

5/6/24

Call from Jost Norman
of Star line

re sample results reported by Jost

Coliform analysis was done at local hospital
at the same time above. Results forthcoming.

0073



May 13, 1985

Norman L. Lovelace
Office of Territorial Program
Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, CA 94105

SUBJECT: NPDES PERMIT RENEWAL STAR-KIST SAMOA AS0000019

Dear Mr. Lovelace:

In compliance with the SUBJECT PERMIT RENEWAL REQUIREMENTS, analyses on a composite sample of the DAF Effluent was taken and prepared for shipment to AECOS laboratory in Honolulu for the parameters indicated as no laboratory in American Samoa has the capability to test various metals, surfactants, sulfide, sulfates and fluorides.

Collection and handling of samples were properly and closely undertaken. As required, supplied labelled bottles were carefully filled with the composite effluent samples and chilled, taking care not to aerate the samples while filling. Required preserving solution was added as per instructions. Chilled samples were immediately packaged with frozen packets for airtransporting to the laboratory in Hawaii via Samoa Air on the same day of collection. Arrangements were made for the contracting laboratory to meet and collect the samples from the airport for their proper handling and immediate analysis.

Simultaneously with the bottle preparation was the sample preparation for the fecal coliform and residual chlorine tests for their immediate determinations. The chlorine test was done here by the Star-Kist Foods, and the fecal coliform test, by the LBJ Medical Laboratory of the Department of Health in American Samoa (See attached report).

0074

May 13, 1985

A summary of the analysis results is as follows:'


| <u>Parameters</u> | <u>Values (mg/L)</u> |
|-------------------|----------------------|
| Aluminum | 0.77 |
| Chromium | 0.03 |
| Zinc | 0.195 |
| Iron | 0.65 |
| Surfactants | 1.60 |
| Fluoride | 1.12 |
| Sulfate | 1550 |
| Sulfite | 46 |
| Sulfide | 11.7 |
| Chlorine | 0.0 |

Attached are copies of the results sent by the Laboratory through Panafax. A hard copy sent through Post will be forwarded as soon as available.

It is hoped that the above results will satisfy the needed data for the progress of our NPDES Permit renewal.

Very truly yours,

STAR-KIST SAMOA, INC.



GREGORY L. DEERING
General Manager

/tsl

cc: Jeff Naumann

0075

509 STARKIST SB

MAY 1, 1985

STARKIST SANOA

ATTN: LABORATORY
RESULTS FROM YOUR 4/19/85 EFFLUENT SAMPLE FOLLOW
(ALL UNITS AS MG/L):

| ANALYTE | VALUE |
|-------------|-------|
| ALUMINUM | 2.77 |
| CHROMIUM | 2.33 |
| ZINC | 2.195 |
| SULFATE | 1532 |
| SULFITE | 46 |
| SULFIDE | 11.7 |
| IRON | 2.65 |
| SURFACTANTS | 1.32 |

AM IN COMMUNICATION WITH EPA REGION IV CONCERNING FLUCRINE ANALYSIS.
WILL NOTIFY YOU OF OUTCOME ASAP.

REDS, D.W. SCHLACK

NNNN

509 STARKIST SB.....
ABOVE SENT VIA ITT MAY 21 1985 2154

TOD MAY 21 1455

*Rec'd 1542
5/1/85*

0076

LD+
509 STARKIST 31

MAY 3, 1965

STARKIST 3180A

ATTN: LARK LUTHERY
RESULTS FROM YOUR 4/19/65 EFFLUENT SAMPLE

WE WOULD LIKE TO CORRECT RECORD FLUORIDE NOT FLOURINE, AS LATTER IS
A VERY REACTIVE AND WOULD NOT PRESERVE IN SAMPLES.

FLUORIDE

1.12 10/1

SEND COPY OF DATA TO FOLLOW BY POST.

REGARDS, E. SCINTNER
ARCO, INC.

....

509 STARKIST 31.....
ARCO SENT VIA ITI MAY 27 1965 1404

0077

LBJ MED. LAB

4/20/85

BACTERIOLOGICAL TEST RESULTS.

FOR WASTE WATER SAMPLE

FROM STAR-KIST.

| Colonies in plate | TOTAL COLIFORM. | FECAL COLIFORM. | USED DILUTION |
|-------------------|-----------------|---------------------|---------------|
| 27 X 100 = | 2,700 | 7 X 100 = 700 | = 1/100 |
| 12 X 10,000 = | 120,000 | 2 X 10,000 = 20,000 | = 1/10,000 |
| 2 X 100,000 = | 200,000 | 0 X 100,000 = 0 | = 1/100,000 |

Received at 9:45 am on 4/19/85.

Analyzed by J. Hatanaka at 4-19-85

Read Results by J. Hatanaka on Saturday 4-20-85 at 9:45

John Hatanaka

I was diluting your sample cause if I filter straight and end up over growth, or you can't read it.

0078



Star-Kist SAMOA, Inc.



P.O. Box 368 • PAGO PAGO • TUTUILA ISLAND • AMERICAN SAMOA

March 12, 1985

Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, CA 94105

Attn: Patricia D. Eklund - Chief Water Quality Permits
Section

Subject: STAR-KIST SAMOA NPDES PERMIT RENEWAL AS0000019

Dear Ms Eklund:

We are in receipt of your letter dated January 15, 1985, and would like to respond to the points of question in the letter.

1. and 2. The application has been signed and resubmitted. The signed certification statement has already been returned to you.

3. Sea water from Pago Pago Harbor is used for part of the processing at the Star-Kist Samoa cannery. In addition, sea water is used in the fish meal scrubber which we would like to include as a non-process flow for outfall 002. The estimated amount of scrubber sea water to be included in 002 is 0.4 million gallons/day. A composite was taken of intake sea water and was found to have a BOD of 183 mg/liter. (183 mg/liter) (8.34 lbs/gallon) (0.4 mgd) = 610 lbs/day BOD 5.

4. As shown in the schematic submitted with the application, tuna is first brought from the freezer or unloaded off the fishing vessel in metal tote bins that are movable with forklifts. Groups of these bins are placed in the thawing area and sea water is sprayed overhead in order to bring the temperature of the fish to approximately 25° to 40° F.

0079

Thawed fish are then butchered by removing the internal organs. Large fish are cut into smaller pieces suitable for cooking and processing. Butchered fish are placed in racks which are wheeled into large steam ovens. Live steam is injected into the oven until the fish are cooked. The racks of cooked fish are then wheeled out of the steam ovens and placed in an area where it is air-cooled and later fine sprayed with fresh water to moisten the skin. The fish are then transferred to the packing tables, where hundreds of people remove the skin, bones, red meat, heads and tails. The red meat is used for canned pet food; the loins are removed and separated for canning for human consumption either as chunk or solid pack.

The scrap which consists of bones, skin, fins, heads and tails is conveyed to the fish meal plant. At the meal plant the scrap is cooked by direct steam injection. Moisture is then removed in a screw press. The press cake is then conveyed into a direct fired rotary dryer. The dried material is then ground and packaged in 100 lbs sacks as fish meal.

The loins are packed either as chunk or solid packed tuna. Vegetable broth or salad oil is added and the cans are sealed. The sealed cans are then washed by a recycle hot water can washing system and are then put into baskets for retorting. Several metal baskets are wheeled into each retort. The retort is sealed and live steam is injected to remove all oxygen and raise the temperature to approximately 242°, which sterilizes the product in the can. This temperature is maintained by steam for the proper period of time depending upon can size and product.

In order to cool the cans fresh water is pumped into the retort in order to bring the temperature of the product in the can down. The baskets of cans are then removed from the retort and allowed to sit for further cooling to ambient temperature. The cans are then labeled and cased. A list of can sealants, lubricating oil and detergents used in the various processes are attached as Appendix A.

5. The only process additives in the DAF treatment consist of aluminum sulfate (alum) and an anionic polymer known as Aqua Ben 235. Aluminum sulfate is used as a flocculent, because of its positive charge which adheres to the solid particles in the raw waste water. The anionic polyacrylamide polymer has a negative charge which causes the positively charged floc particles to form larger floc clumps, that are easily removed in the flotation clarifier and become DAF sludge. Typical dosages of the two treatment chemicals are 55 - 80 ppm of alum and 0.8 - 1.5 ppm of anionic polymer.

6. Composite sample of the DAF effluent will be analyzed for the parameters indicated in the January 15th letter, except that no laboratory in American Samoa has the capability to test for aluminum, chromium, zinc, sulfate, sulfite, iron, surfactants or flourine. Results of these analyses will follow when they are received from the contract laboratory in Honolulu. The tests for fecal coliforms and chlorine will be performed in American Samoa on grab samples, and will follow shortly.

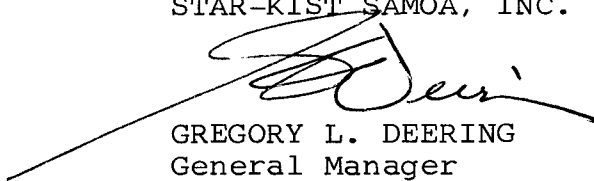
7. At present, scrubber water, retort cooling water and boiler blow-down waters are sent to the DAF treatment plant. As they are of a very low level of contamination except for elevated temperature, we would wish to discharge those separately in a non-process outfall as we do at our other cannery locations. This will further reduce the hydraulic loading to the treatment plant, which could result in improved removal efficiency of process wastes.

8. Star-Kist Samoa outfall consists of a 10" flexible pipe with no diffuser located at a depth of 52 ft. at point of discharge.

We hope the above information provides that needed in order to progress the application. We will forward the results of the requested analyses as soon as they become available. If you have any further questions please do not hesitate to call Jeff Naumann at Star-Kist Foods, in Los Angeles, (213) 548-4411 Ext 6319.

Sincerely,

STAR-KIST SAMOA, INC.



GREGORY L. DEERING
General Manager

/tsl

Attachments

cc: Jeff Naumann, Star-Kist Foods, Inc.

APPENDIX A

PROCESS MATERIALS USED IN TUNA PROCESSING AT STAR-KIST SAMOA, NPDES AS0000019

1. Can end sealing compound - Dewey & Almy 9101
2. Lubricating oils used within the cannery:
 - a. U. S. P. White (Mineral) Oil
 - b. Poly F M-2 Grease
 - c. Chevron EP-2 Grease
 - d. 30 W Deco 200
 - e. 40 W Deco 200
 - f. 100 X Hyd. Oil
 - g. 85 - 140 W Spec. API GL-5 Gear Lub.
 - h. 80 - 90 W. Gear Lub.
3. Can washing detergents (if any) - NIL
4. Sanitizing chemicals:
 - a. Oakite 62
 - b. Oakite General Cleaner
 - c. Oakite Liquid Power Det.
 - d. Oakite Circhlor
 - e. Oakite Handsome Soap
 - f. Caustic Soda



Star-Kist SAMOA, Inc.



P.O. Box 368 • PAGO PAGO • TUTUILA ISLAND • AMERICAN SAMOA

March 12, 1985

Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, CA 94105

Attn: Patricia D. Eklund - Chief Water Quality Permits
Section

Subject: STAR-KIST SAMOA NPDES PERMIT RENEWAL AS0000019

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3. Sea water from Pago Pago Harbor is used for part of the processing at the Star-Kist Samoa cannery. In addition, sea water is used in the fish meal scrubber which we would like to include as a non-process flow for outfall 002. The estimated amount of scrubber sea water to be included in 002 is 0.4 million gallons/day. A composite was taken of intake sea water and was found to have a BOD of 183 mg/liter. (183 mg/liter) (8.34 lbs/gallon) (0.4 mgd) = 610 lbs/day BOD 5.

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0083

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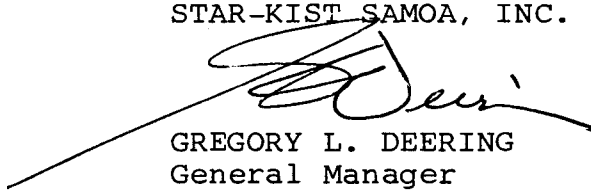
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We hope the above information provides that needed in order to progress the application. We will forward the results of the requested analyses as soon as they become available. If you have any further questions please do not hesitate to call Jeff Naumann at Star-Kist Foods, in Los Angeles, (213) 548-4411 Ext 6319.

Sincerely,

STAR-KIST SAMOA, INC.



GREGORY L. DEERING
General Manager

/tsl

Attachments

cc: Jeff Naumann, Star-Kist Foods, Inc.

0085

APPENDIX A

PROCESS MATERIALS USED IN TUNA PROCESSING AT STAR-KIST SAMOA, NPDES AS0000019

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 - b. Poly F M-2 Grease
 - c. Chevron EP-2 Grease
 - d. 30 W Deco 200
 - e. 40 W Deco 200
 - f. 100 X Hyd. Oil
 - g. 85 - 140 W Spec. API GL-5 Gear Lub.
 - h. 80 - 90 W. Gear Lub.
3. Can washing detergents (if any) - NIL
4. Sanitizing chemicals:
 - a. Oakite 62
 - b. Oakite General Cleaner
 - c. Oakite Liquid Power Det.
 - d. Oakite Circhlor
 - e. Oakite Handsome Soap
 - f. Caustic Soda

Telephone with Jeff Naumann

2/22/85

of Starkist in Terminal Island

re: Samoa permit.

I inquired about the additional application information which we had requested on Jan 15, 1985. Mr. Naumann said they had received the letter and that a response was on the way to Samoa for approval.

Mr. Naumann also described some plant processes; ~~canning~~ ^{canning, canning} & meat drying

canning is a "dry" process. Flat coated sheets are received in Samoa where they are formed into open cans. A rubber gasket coating is applied before cans are filled. Cans are filled & then washed. This wash water is a process water. Then, retort, and the retort cooling water. Some contamination of this water is possible due to leaky cans etc. Other plants discharge this stream as non-process

Meal dryer consists of a #5 oil fueled heat source which produces hot gasses which are fed through a rotating drum dryer. These gasses carry away combustion products & meal products. Gasses are sent to a venturi scrubber.

Mr. Naumann suggested contacting Eliza Hill or Dick Harris for information on the LA Board's permitting of canneries.

He also spoke about the BOD intake values. The Intake is located close to the discharge - this is the cause of the high BOD values, in addition to poor inner harbor circulation. He indicated that he would ask for some more BOD sampling.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAY 15 1985

Gregory L. Deering
 Star-Kist Samoa, Inc.
 P.O. Box 368
 Pago Pago, Tutuila Island
 American Samoa 96799

Dear Mr. Deering:

We have conducted an initial review of your NPDES renewal application, dated December 19, 1984, and have found a number of deficiencies. Please submit the following information:

- 1) Application signature.
- 2) Signed Certification Statement (enclosed).
- 3) Sampling and all calculations for intake BOD values listed for outfall 002.
- 4) Description of canning process including a list of all process materials such as can sealants, lubricating oils and detergents used for can washing.
- 5) List of all process additives used in the DAF treatment and concentrations for each additive.
- 6) Analysis of outfall effluent for any metals, oils or surfactants which may be present due to the use of any of the materials listed in 4) and 5) above. This analysis should consist of at least one measurement each for:

Aluminum
 Chromium
 Zinc
 Chlorine
 Fecal Coliform
 Sulfate (as S)
 Sulfite (as SO₃)
 Sulfide (as S)
 Total Iron
 Surfactants
 Flourine

0089

CONCURRENCES

| | | | | | | | | |
|---------|---------|-----------|---------|--|--|--|--|---------|
| SYMBOL | W-5-1 | W-1-1 OTP | W-5-1 | | | | | |
| SURNAME | Gordon | Allen | Ekland | | | | | mailed |
| DATE | 1/14/85 | 1/14/85 | 1/15/85 | | | | | 1/15/85 |

7) Present disposal methods (eg:

Heat drying scrubber water
Retort cooling water
Boiler blowdown

8) Water depth of outfall, and outfall pipe diameter.

We cannot proceed with the processing of your application until this information is received and the application is deemed to be complete. Enclosed, please find your permit application and the Certification Statement for your signature.

Please contact Paul Gjording of the Water Quality Permits Section at (415) 974-7367 if you have any questions regarding this matter.

Sincerely yours,

Original Signed by:

Patricia D. Oklund
Chief, Water Quality Permits Section

Enclosures

cc: Mr. J. Baumann, Starkist Foods, Inc.

p.j.
gjording / chris 901B
disc 36 1/14/85

0090

In Reply

Refer to: Sheila Wiegman (W-1-1)

0 4 FEB 1987

Albert E. Cropley
 President and General Manager
 Star-Kist Samoa, Inc.
 P.O. Box 368
 Pago Pago, Tutuila
 American Samoa 96799

Dear Mr. Cropley:

A National Pollutant Discharge Elimination System (NPDES) permit has been issued to the following discharger:

Star-Kist Samoa, Inc.
 NPDES Permit No. AS00000019

The staff at the Environmental Protection Agency (EPA) has reviewed the NPDES permit application for this facility and has prepared a draft permit, in accordance with the Clean Water Act, as amended. The EPA has also published a public notice of its intent to issue a permit to the above discharger. After considering the expressed views of all interested persons and agencies, pertinent Federal statutes and regulations, the EPA, pursuant to 40 CFR 124, has prepared a final permit which does not differ significantly from the draft permit. Changes to the permit are discussed in the enclosed "Response to Comments."

The NPDES permit is hereby issued upon the date of signature and shall become effective 33 days from the date of mailing, unless there is a written request for an evidentiary hearing. Pursuant to 40 CFR 124.76, requests for an evidentiary hearing must state each of the legal or factual questions alleged to be at issue and must demonstrate one of the following for each issue being raised in the hearing request: that the issue was raised during the public comment period; that the issue was not reasonably ascertainable during the public comment period; or

0027

CONCURRENCES

| SYMBOL | W-5-1 | W-5-1 | W-5-1 | W-5-1 | W-1-1 | | |
|---------|---------|-----------|---------|---------|---------|--------|--|
| SURNAME | Narway | Greenberg | W-5-1 | W-5-1 | Cox | W-1-1 | |
| DATE | 1/22/87 | 1/22/87 | 1/23/87 | 1/23/87 | 1/23/87 | 2/2/87 | |

Lyle Richmond
Chairman
Environmental Quality Commission
American Samoa Government
Pago Pago, A.S. 96799

4 FEB 1987

Dear Mr. Richmond:

We are now issuing the National Pollutant Discharge Elimination System (NPDES) permits for Star-Kist Samoa, Inc. and the Samoa Packing Company and would like to provide an explanation as to how the recommendations contained in your letter of October 20, 1986 were addressed in the permits. All seven of the recommendations have been incorporated with the exception of that concerning the length of time receiving water monitoring will be required. You recommended that such monitoring be conducted for three years following permit issuance, after which an alternative for meeting American Samoa Water Quality Standards (WQS) would be chosen within six months. The final permit requires one year of monitoring after permit issuance and selection of an alternative to achieve compliance with American Samoa WQS within two years.

There are several reasons why the permit requirements are structured in this way. First, compliance with American Samoa WQS must be achieved within the five year permit term as required under 40 CFR 122.47(a)(1). Secondly, it is our view that data obtained from three years of receiving water monitoring following permit issuance is not necessary to gauge the effects of high strength waste segregation. As you recall, the harbor responded relatively quickly when the Samoa Packing facility was not discharging. Past experience with estuarine systems suggests that the effects will be noted immediately or within several months when a major source of nutrient input is eliminated. As a great deal of study has already been devoted to this issue, we simply do not think that an additional three years of monitoring data is necessary. In any event, the permits have provisions for modification pending changes in American Samoa WQS and results of the study on alternatives to meet American Samoa WQS due six months after high waste segregation.

| CONCURRENCES | | | | | | | |
|--------------|---------|--------|--|------|--|--|--|
| SYMBOL | W-1-1 | W-1-1 | | | | | |
| SURNAME | Wiegman | Cox | | | | | |
| DATE | 2/4/87 | 2/4/87 | | 0091 | | | |

If you have any questions on the matters, please contact me
at (415) 974-7431 or Susan Cox at (415) 974-7432.

Sincerely,

Original signed by:
NORMAN L. LOVELACE

Norman L. Lovelace
Chief
Office of Territorial Programs

cc: Pati Paiai, Executive Secretary, EQC

RECEIVED
OCT 21 1986
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Oct 21,86 15:17 D137146

'86 OCT 22 A8:30

P.01



AMERICAN SAMOA GOVERNMENT
PAGO PAGO, AMERICAN SAMOA 96799
OFFICE OF THE GOVERNOR
ENVIRONMENTAL PROTECTION AGENCY

In reply refer to:
Serial: 330

October 20, 1986

Mr. Norman Lovelace, Chief
Office of Territorial Programs
U.S. Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, California 94105

Dear Mr. Lovelace:

On Friday, October 17, the Environmental Quality Commission discussed the proposed Draft National Pollution Discharge Elimination System (NPDES) permits for Star Kist Samoa, Inc. and Samoa Packing Company. In light of the recent American Samoa Government (ASG) - Joint Cannery Study meeting we feel that in order to continue towards Water Quality Standard compliance in the harbor with the least degree of litigation, combined with a cooperative effort from the canneries, changes in the proposed permits should be considered.

The following are recommended principles to be incorporated into the NPDES permits.

1. Both canneries should be required within one (1) year of the effective date of the permits to have completely implemented high strength waste segregation.
2. To ensure accurate monitoring of the amount of Nitrates and phosphates being discharge in relation to the volume of waste water flow into the receiving waters, we feel that the draft permits composite sampling requirements should be followed.
3. Harbor Water Quality sampling will continue on a monthly basis for three years following the issuance of the new NPDES permits.
4. The canneries should be required to conduct an extensive current monitoring program in the vicinity of the proposed outer harbor


Mr. Norman Lovelace, Chief
Page -2-

generated data. A period of six months should be allowed to make this determination. At the end of six months a decision should be made on the program to be followed to achieve full compliance with the water quality standards for Pago Pago Harbor when the proposed NPDES permits expire five years after their issuance.

6. Decisions on granting of the zone of mixing and interpretation of monitoring data for enforcement purposes should be delayed until the six month final evaluation period.
7. Proposed outfall 002 for Star Kist Samoa should accommodate only storm water discharge. No other waste water flows, contact or non-contact, should be allowed to discharge at this point. If one or more of the proposed waste water flows are, in the opinion of the U.S. EPA and ASEPA, found not to contain contaminants which would violate ASG water quality standards disposal at outfall 002, could be reconsidered.

Although the aforementioned provisions vary considerably from the Draft NPDES permits the EQC considers these steps necessary to continue progressing towards improved water quality conditions in the harbor.

Sincerely,


LYLE RICHMOND, CHAIRMAN
ENVIRONMENTAL QUALITY COMMISSION



TERRITORY OF AMERICAN SAMOA
OFFICE OF THE GOVERNOR
FAGATOGO 96799

A. P. LUTALI
GOVERNOR

EMI F. HUNKIN, JR.
LIEUTENANT GOVERNOR

(684) 833-4116

October 9, 1986

Serial: 1805

Norman Lovelace, Chief
Office of Territorial Programs
U.S. Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, California 94105

Dear Mr. Lovelace:

On October 2 and 3, 1986, representatives of the American Samoa Government, Samoa Packing Company and Star-Kist Samoa, Inc. met at the offices of Star-Kist Foods, Inc. in Long Beach, California to discuss the Draft Phase II Report prepared by CH2M Hill as the engineering consultant engaged by the three principals to study alternatives for the reduction of fish cannery waste water effluent loading into Pago Pago Bay and the program to be undertaken as a result of this study.

Participants at the meetings were:

American Samoa Government

Lyle L. Richmond, Legal Counsel to the Governor
Michael Dworsky, EPA Construction Grants Manager
Ward Conaway, former EPA Construction Grants Manager

Samoa Packing Company

Fred H. Avers, President
Frank Hackman, Associate Counsel, Environment and Energy
Ron Degges, Director, Production and Engineering

Star Kist Samoa, Inc.

Jeffrey R. Naumann, Manager, Environmental Engineering
Dave Ballands, General Manager, Engineering Can Making Services

At the conclusion of the meetings the participants reached the following understanding on the program for the future

0095

3/86

1. Samoa Packing and Star-Kist Samoa shall have in full operation within one (1) year systems of high strength waste segregation, which wastes shall be ocean disposed. The year shall commence with the issuance of the canneries' new NPDES permits.

2. During the first three years following issuance of the new NPDES permits, water sampling shall continue on a monthly basis for analysis of effluent content. Additionally, currents in the vicinity of the proposed outer harbor discharge area shall be monitored extensively.

3. At the end of the first three years following issuance of the new NPDES permits, the three principals and probably an independent consultant selected mutually would separately and collectively evaluate the condition of Pago Pago Bay on the basis of the data collected during the first three years and other relevant observations and criteria for a period of six months. A decision would be made, mutually if possible, at the end of this six-month period on the program to be followed to achieve full compliance with the water quality standards for Pago Pago Bay when the new NPDES permits expire five years after their issuance.

4. No decisions or commitments shall be made at this time with respect to final disposal alternatives, interpretation of monitoring data for enforcement purposes, or granting any zone of mixing around any point of discharge. These decisions and commitments would be made during the six-month final evaluation period following the three-year data collection period after issuance of the new NPDES permits. All principals reserve their respective rights to establish their positions on these issues and to legally challenge them if mutual decisions or commitments are not determined by the end of this six-month period.

The Government contemplates this program for three basic reasons. First, this program essentially reflects the intent of the principals developed at their interim meeting in September 1985 at Honolulu, Hawaii on Phase II of the study to provide for high strength waste segregation followed by a monitoring period to determine the actual effects segregation.

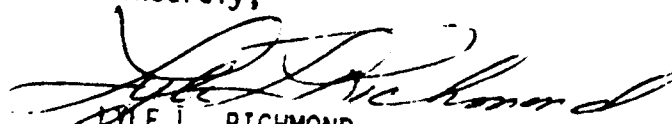
Second, this program ensures the near-term implementation of high strength waste segregation systems in a spirit of mutual cooperation between the principals towards the objective of improving the water quality of Pago Pago Bay to acceptable levels as contemplated by the tax exemption agreements between the Government and each of the canneries. It is mutually believed that high strength waste segregation is a key initial step towards this objective which should be taken now.

Third, this program should provide substantially more reliable data as the basis for determining the action required to accomplish real long-term improvement in the water quality of Pago Pago Bay, particularly the inner harbor area, consistent with necessary economic and other social activity in the Territory.

AN LOVELACE
ge -3-
10/9/86

This program is, we believe, a positive, constructive and relatively concrete step towards practicable enhancement of Pago Pago Bay waters. Therefore, it is requested that the U.S. Environmental Protection Agency revise the proposed new NPDES permits for the canneries to reflect the participants' understanding as set forth above. Essentially, this revision only postpones final determinations on waste disposal alternatives in the immediate future, six months hence, until a time when more reliable data three years from now will be available to justify those critical decisions. With your agency's concurrence on the proposed program, the principals can move forward with its implementation.

Sincerely,



LYLE L. RICHMOND
Legal Counsel to the Governor

LLR:mtl

0097



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region • Western Pacific Program Office
2570 Dole St. • Honolulu, Hawaii 96822-2396

September 23, 1986 F/SWR1:ETN

Mr. Frank M. Covington
Director, Water Management Division
Region IX
Environmental Protection Agency
215 Fremont Street
San Francisco, CA 94105

Dear Mr. Covington:

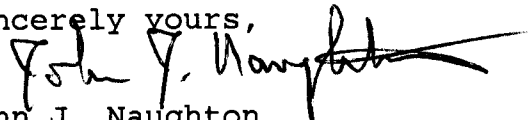
This responds to your letter of August 21, 1986 to Mr. Eugene T. Nitta of my staff requesting a list of threatened and endangered species or designated critical habitat found in the vicinity of the waste water discharges for Star-Kist Samoa Inc. and Samoa Packing Company in American Samoa.

Listed species under the jurisdiction of the National Marine Fisheries Service that may be generally found in the nearshore waters of Tutuila include the endangered hawksbill turtle (Eretmochelys imbricata) and the threatened green turtle (Chelonia mydas) in small numbers throughout the year. The endangered humpback whale (Megaptera novaeangliae) is a seasonal visitor, found within the 100 fathom isobath around the Islands of American Samoa during the southern winter months. To our knowledge critical habitat for these species has not been proposed or designated in American Samoa.

We have reviewed the discharge limits proposed for the two canneries and find that the issuance of the NPDES permits will not likely adversely affect the listed species noted above.

This concludes the Section 7 process for this project. Should the permit conditions be subsequently modified, or an effect not previously considered becomes evident, consultation must be re-initiated at that time. If there are any further questions please contact Eugene Nitta, Protected Species Program Coordinator at 808-955-8831.

Sincerely yours,


John J. Naughton
Acting Administrator

cc: F/SWR

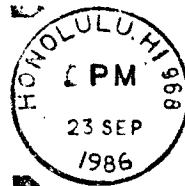
0098





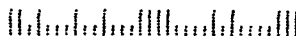
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region • Western Pacific Program Office
2570 Dole St. • Honolulu, Hawaii 96822-2396

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
U. S. DEPARTMENT OF COMMERCE
COM-210

Mr. Frank M. Covington
Director, Water Management Division
Region IX
Environmental Protection Agency
215 Fremont Street
San Francisco, CA 94105



~~Kens~~ → Madonna
FYI
PC 4-1-1



rec'd EPA 10/6/86
ARC

AMERICAN SAMOA GOVERNMENT
PAGO PAGO, AMERICAN SAMOA 96799
ENVIRONMENTAL QUALITY COMMISSION
GOVERNMENT OF AMERICAN SAMOA
SEPTEMBER 22, 1986

In reply refer to:
Serial: 284

Norm Lovelace, Chief
Office of Territorial Programs
U.S. Environmental Protection Agency
Region IX
215 Fremont St.
San Francisco, California 94105

RE: Water Quality Standards compliance clarification

Dear Mr. Lovelace:

The Environmental Quality Commission (EQC) was directed by ASCA 24.0106(10) to "establish air and water quality standards for the territory". The adoption of Rule 8-81 by the EQC fulfilled this mandate with respect to water quality. The standards classify the waters of the Territory of American Samoa and establish standards for each classification.

However it has come to our attention over the past year that the methodology for enforcing the water quality standards (WQS) has not been clearly stated by the EQC and has led to some misunderstandings in regard to the Pago Pago Harbor.

In adopting the current WQS the EQC expressed the policy that all waters of the harbor will receive equal protection. The EQC did not then, and does not now, envision a compliance determination methodology that would, in effect, provide for unequal minimum levels of water quality in the harbor. The only exception to this is within approved mixing zones that are established under the criteria in the WQS. The EQC recognized that there are substantial differences in water quality in the harbor system. Specifically, the inner harbor area is significantly lower in quality than the outer harbor area. The WQS that apply to the harbor were developed with these differences in mind. The entire harbor system was studied in detail to formulate the WQS. The resulting WQS prescribe a minimum level of water quality for harbor waters that is somewhat lower than would occur naturally because of the various influences present in the harbor. The EQC's policy is that all waters within the harbor are to achieve the minimum level of water quality specified in the WQS.

0099

As you may recall from our discussions in September of "85" the question EPA raised was how does EQC determine whether or not violations of the American Samoa WQS exists in Pago Pago Harbor. Two different methods of interpretation have been presented over the past year in our discussion of this subject. The EQC in adopting this statement of clarification is not revising the WQS at this time, although the WQS are scheduled for review in FY 87. Clarification on this point is particularly important now because of the nearing finalization of the Phase II report of the Joint Study and the NPDES permits for the two canneries.

In reviewing this issue, one interpretation is that the compliance status of the WQS is ascertained by performing the specified statistical analysis on the data from all the monitoring stations in the inner harbor, outer harbor and transition zone collectively. Some of the confusion over this issue comes from some of the documents prepared during the WQS development. These documents describe suggested monitoring programs and data analysis to evaluate water quality. However, these documents were designed to serve a purpose other than making specific regulatory decisions regarding compliance with the WQS. The program set forth in the documents are useful aids in making statistical overview evaluations of water quality and providing an information base for future reviews and revisions of the WQS. A meeting with Mr. Hans Krock, editor of the "American Samoa Water Quality Monitoring Handbook" in June "86" confirmed that it was never intended or designed for the purpose of making localized and specific decisions regarding WQS compliance. The documents are not referenced in the WQS themselves and would not seem to have any regulatory status.

The WQS were developed in compliance with the Clean Water Act which has as its objective "to restore and maintain the chemical, physical, and biological integrity of the Nation's Waters". Any interpretation which advocates averaging data from many points has the effect of masking localized water quality problems by combining them with other areas that may have acceptable water quality. Thus, although a portion of the harbor is violating WQS while others are in compliance, the result would be that the entire harbor is erroneously judged to meet the WQS. This is not the intent of the WQS, nor do we believe it the intent of the U.S. Environmental Protection Agency when you approved the WQS.

The EQC has interpreted the compliance of the WQS as determined by considering the data from each point separately and that the compliance status is determined on a point-by-point basis. This interpretation is consistent with many provisions of the WQS, and with other State WQS throughout the land. The provisions for granting of mixing zones and the associated prohibitions (e.g., not allowed within 500 feet of Goat Island Point...no part of a shoreline, reef or bottom substrate shall be included in any zone of mixing) suggests that the WQS are intended to apply to every point in the harbor. Mixing zones are designed to provide for

localized, alternate standards within the zone (under stringent conditions) to reflect the physical and practical realities of treatment technologies. In some ways the averaging approach would define the entire inner harbor as a mixing zone, which is clearly contrary to the WQS.

Mixing zones are designed to provide localized variations from WQS in cases where "Compliance with the existing WQS at the point of discharge would produce serious economic hardships without equal or greater benefit to the public..." Also, mixing zones must meet several other criteria specified in the WQS, including the requirement that WQS be achieved at the boundaries of the mixing zone. The mixing zone provisions of the WQS clearly illustrate that the EQC intends to have the WQS apply equally to every point within the harbor.

In conclusion, the EQC's policy is that all points within the harbor are to be considered separately for purposes of determining WQS compliance. For purposes of evaluating overall water quality and determining general trends, the data interpretation methods that combine data from various locations in the harbor will continue to be used. We will be preparing detailed data interpretation procedures for determining WQS compliance that will embody the following principles:

- o Compliance will be determined at each point within the harbor separately (e.g., point-by-point).
- o Compliance will be determined using the temporal variations specified in the WQS.
- o Compliance will be determined at any particular time by analyzing the previous 12 months of data.

We hope to have this procedure fully documented within a month and will provide you with a draft copy to review.

Sincerely,



Pati Faiai, Executive Secretary
Environmental Quality Commission



United States Department of the Interior

FISH AND WILDLIFE SERVICE

300 ALA MOANA BOULEVARD
P. O. BOX 50167
HONOLULU, HAWAII 96850

IN REPLY REFER TO:

AUG 25 1986

Mr. Frank M. Covington
Director, Water Management Division
U. S. Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, California 94105

Dear Mr. Covington:

This responds to your August 21 letter concerning your proposal to reissue NPDES permits for the following tuna canneries in American Samoa:

Star-Kist Samoa, Inc.
Samoa Packing Company

Specifically, you requested a list of plants and/or animals which are listed or proposed for listing as endangered or threatened species under the Endangered Species Act.

Although the green sea turtle (*Chelonia mydas*) may swim in the waters of Pago Harbor in the vicinity of the cannery outfalls, we would not expect them to be affected by the discharges as described in your letter. These turtles are not known to nest near any of the areas which may be affected by such discharges. As sea turtles, while at sea, fall under the jurisdiction of the National Marine Fisheries Service, you may wish to also contact them for comment.

Thank you for allowing us to comment on this proposal.

Sincerely yours,

William R. Kramer
Acting Project Leader
Office of Environmental Services



0102

Save Energy and You Serve America!



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street

San Francisco, Ca. 94105

SEP 29 1985

Mr. Lyle Richmond
Chairman
Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Richmond:

During the recent visit of Danny Collier and myself to American Samoa we had the opportunity to discuss the status of the Joint Study. Several issues came up during these discussions that I wish to address. The main area that I want to address is the apparent difference of interpretation on how to determine whether or not violations of the American Samoa water quality standards (WQS) exists in Pago Pago Harbor. I believe clarification of this matter is vital.

My understanding of the issue is that two different interpretations exists on determining WQS compliance. One interpretation is that the compliance status of WQS is ascertained by performing the specified statistical analysis on the data from all the monitoring stations in the inner harbor, outer harbor and transition zone collectively. And the other interpretation is that the compliance status is determined by considering the data from each point separately and that the compliance status is determined on a point-by-point basis. We maintain that the second interpretation is the only acceptable and reasonable way to interpret the WQS. We have several reasons for holding this view which are discussed below.

The principal difficulty we have with the first interpretation is that it is fundamentally contrary to the intent and purpose of the WQS. The WQS were developed to designate beneficial uses and prescribe standards necessary to maintain those uses for the "... waters of the Territory ...". The first interpretation has the effect of masking localized water quality problems by combining them with other areas that may have acceptable water quality. Thus, although a portion of the harbor is violating WQS while others are in compliance, the result would be that the entire harbor is erroneously judged to meet WQS. We do not believe this was, and is, the intent of the WQS. It certainly was not our intent in approving the WQS.

0104

The first interpretation also is inconsistent with many provisions of the WQS. The provisions for granting of mixing zones and the associated prohibitions (e.g., not allowed within 500 feet of Goat Island Point) suggests that the WQS are intended to apply to every point in the harbor. Mixing zones are designed to provide for localized, alternate standards within the zone (under stringent conditions) to reflect the physical and practical realities of treatment technologies. In some ways the first approach would define the entire harbor as a mixing zone, which is clearly contrary to the WQS.

I believe some of the confusion over this issue comes from some of the documents that were prepared during WQS development. These documents describe suggested monitoring programs and data analyses to evaluate water quality. And in several places they suggest procedures that tend to support the first interpretation. However, I believe these documents were designed to serve a purpose other than making specific regulatory decisions regarding compliance with the WQS. I think the programs set forth in the documents are useful aids in making overview evaluations of water quality and providing an information base for future reviews and revisions of the WQS. But I do not believe they were intended or designed for the purpose of making localized and specific decisions regarding WQS compliance. Also, the documents are not referenced in the WQS themselves and would not seem to have any regulatory status.

At this point, I believe it would be useful for the Environmental Quality Commission (EQC) to consider this matter and adopt a statement of clarification. I do not think such a statement should be considered (at least on our part) as a formal revision to the existing WQS. It would also be useful for the EQC to adopt a statement which specifies the monitoring protocol and data analysis process that would be accepted as a means to judge whether the WQS are being achieved at any particular point. We would be happy to work with you and your staff on such a statement.

Please contact Danny Collier or myself if you have any questions or would like to discuss this matter in greater detail.

Sincerely yours



Norman L. Lovelace

Chief, Office of Territorial Programs

APR 5 1985 UNITE STATES ENVIRONMENTAL PROTECTION AGENCY

PLUME Modeling Results for Canneries and the Utulei STP Discharges

Paul Gjording
Environmental Engineer

Ralph Fulgham
Environmental Quality Coordinator, American Samoa Government

The attached computer printouts show the PLUME results for the canneries and Utulei. Each run synthesizes the input conditions, and presents the resulting average dilution.

These PLUME runs represent modeling of the following conditions:

Run # Input Conditions Modeled

1 0.063 cms = 2.2 cfs discharge
16.5 ppt salinity, 25.2°C effluent
10" port at 85' depth

Ambient salinity and temperature as recorded in August 1982 at Station 1 in the CH2M Hill "Oceanographic Studies in Support of American Samoa Wastewater Facilities Planning", April 1984.

Represents Star-Kist Samoa discharge
Dilution = 70

2 0.019 cms = 0.43 MGD discharge
0.0 ppt salinity, 26.6°C effluent
6" port at 85' depth

Ambient salinity and temp as in Run #1

Represents Samoa Packing discharge
Dilution = 150

3 0.057 cms = 1.3 MGD discharge
0.0 ppt salinity, 27.8°C effluent
12" port at 140' depth

Ambient salinity and temperature as recorded on 7/11/79 at Station 10 in the M&E Pacific "Baseline Water Quality Survey in American Samoa", October 1979

Represents DPW Utulei discharge
Dilution = 300

0103

CONCURRENCES

| | | | | | | | | |
|---------|----------|--|--|--|--|--|--|--|
| SYMBOL | W-5-1 | | | | | | | |
| SURNAME | Gjording | | | | | | | |
| DATE | 4/5/85 | | | | | | | |

The final diameter of the plume when it reaches the surface is shown under DIA on the printout.

| <u>Run #</u> | <u>Final Plume diameter (m)</u> |
|--------------|---------------------------------|
| 1 | 9.1 |
| 2 | 8.22 |
| 3 | 13.25 |

project number: 290ab
gjording/draft: 04-05
gjording/re-draft: 04-05
gjording/final:
harold disk: #1

| | | | | |
|-------|------|-------|-----|-----|
| 0 | 1 | 0 | | |
| 0.063 | 1 | 0.254 | 0.0 | 26. |
| 0.0 | 0.0 | 0.0 | | |
| 10 | 16.5 | 25.2 | | |
| 0. | 35.0 | 27.5 | | |
| 3. | 35.5 | 27.4 | | |
| 6. | 35.5 | 27.4 | | |
| 9. | 35.5 | 27.4 | | |
| 12. | 35.6 | 27.3 | | |
| 15. | 35.7 | 27.3 | | |
| 18. | 35.8 | 27.3 | | |
| 21. | 35.8 | 27.2 | | |
| 24. | 35.8 | 27.2 | | |
| 27. | 35.8 | 27.1 | | |

28.8

Ru

1

Re
S. L.

| | | | | | | |
|----------|----------|------------|----|-----|------|--------|
| RRRRRRRF | PPPPPPP | TTTTTTTTTT | | 11 | | |
| RRRRRRRF | PPPPPPP | TTTTTTTTTT | | 11 | | |
| RR | RF | PP | PP | IT | 1111 | |
| RF | RR | PP | PP | TT | 1111 | |
| RR | RF | PP | PP | TT | ;;; | 11 |
| RR | RF | PP | PP | TT | ;;; | 11 |
| RRRRRRRR | PPPPPPPP | TT | | ;;; | 11 | |
| RRRRRRRF | PPPPPPPP | TT | | ;;; | 11 | |
| RR | RF | PP | | TT | 11 | |
| RR | RF | PP | | TT | 11 | |
| RF | RR | PP | | TT | ;;; | 11 |
| RF | RR | PP | | TT | ;;; | 11 |
| RF | RR | PP | | TT | :: | 111111 |
| RF | RR | PP | | TT | :: | 111111 |

INITIAL TEMPERATURE OF THE PLUME = 25.20 DEGREES CENTIGRADE
 INITIAL SALINITY OF THE PLUME = 16.50 PPT
 INITIAL DENSITY OF THE PLUME = 1.00943 GM/CC
 DISCHARGE VELOCITY = 1.243 M/S
 FROUDE NUMBER = 6.7

| DEPTH (M) | SALIN (PPT) | TEMP (C) | SIGMAT |
|--------------|----------------|-------------|--------|
| 0.00 | 35.00 | 27.50 | 22.58 |
| 3.00 | 35.50 | 27.40 | 22.99 |
| 6.00 | 35.50 | 27.40 | 22.99 |
| 9.00 | 35.50 | 27.40 | 22.99 |
| 12.00 | 35.60 | 27.30 | 23.10 |
| 15.00 | 35.70 | 27.30 | 23.17 |
| 18.00 | 35.80 | 27.30 | 23.25 |
| 21.00 | 35.80 | 27.20 | 23.28 |
| 24.00 | 35.80 | 27.20 | 23.28 |
| 27.00 | 35.80 | 27.10 | 23.31 |

TOTAL EFFLUENT FLOW = 0.0630 CMS
 NUMBER OF PORTS = 1
 PORT DIAMETER = 0.254 M
 PORT SPACING = 1000.0 M(DEFAULT)
 VERTICAL PORT ANGLE FROM HORIZONTAL = 0.0 DEGREES
 PORT DEPTH = 26.00 M

| T (SEC) | S (M) | X (M) | Z (M) | DIA (M) | H (M) | THETA (DEG) | FLUX-AVE DILUTION |
|------------|----------|----------|----------|------------|----------|----------------|----------------------|
| 4.62 | 4.26 | 3.86 | 24.46 | 1.31 | 1.54 | 46.5 | 6.24 |
| 10.29 | 7.16 | 5.36 | 21.99 | 2.20 | 4.01 | 67.6 | 14.10 |
| 17.01 | 10.11 | 6.25 | 19.18 | 3.11 | 6.82 | 76.1 | 25.09 |
| 24.48 | 13.08 | 6.85 | 16.27 | 4.03 | 9.73 | 80.1 | 38.30 |
| 32.51 | 15.99 | 7.30 | 13.39 | 4.93 | 12.61 | 82.0 | 52.14 |
| 41.32 | 18.89 | 7.67 | 10.52 | 5.82 | 15.48 | 82.9 | 65.35 |
| 51.28 | 21.77 | 8.03 | 7.66 | 6.71 | 18.34 | 82.9 | |
| 62.72 | 24.66 | 8.38 | 4.79 | 7.60 | 21.21 | 82.8 | |
| 75.78 | 27.55 | 8.75 | 1.93 | 8.49 | 24.07 | 82.1 | |
| 88.88 | 29.55 | 9.22 | 0.00 | 9.10 | 26.00 | 46.4 | |

COMPUTATIONS CEASE: PLUME SURFACES

TRAPPING LEVEL = 9.29 M BELOW WATER SURFACE.
 AVERAGE DILUTION = 70.1

AS00000027, AS00000019

12/12/86

Schedule to Build proposed outfall:

6 mos. for design of 2.9 mi., 18" dia,
1500' outfall @ 180' depth

1 1/2 - 2 yrs construction

6 mos + 1 1/2 yrs = 2 yrs

Generous → 1/2 yr design
2 yrs construct

Barge Hi-Strength Wastec 12 mos.

Report on alt. to achieve WAS 18 mos.

Progress report 30 mos.

Progress report 42 mos.

Achieve compliance 48 mos. 4 yrs

• David Stringfield
Laughlin
discharge to Colo.

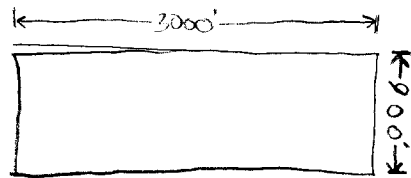
Kennedy / Jenks / Chilton
Reno

(702) 827-6660
Ref. to Colorado River @
Bullhead City
Rivera Treatment Permit

Effluent pipeline from the canneries to Tafagamuana
Point of outfall set at 135 ft.

2 pipeline routings, } \$3.2 to 6.1 million
2 methods construction

1500'



Flow = 3mgd

2.9 mi

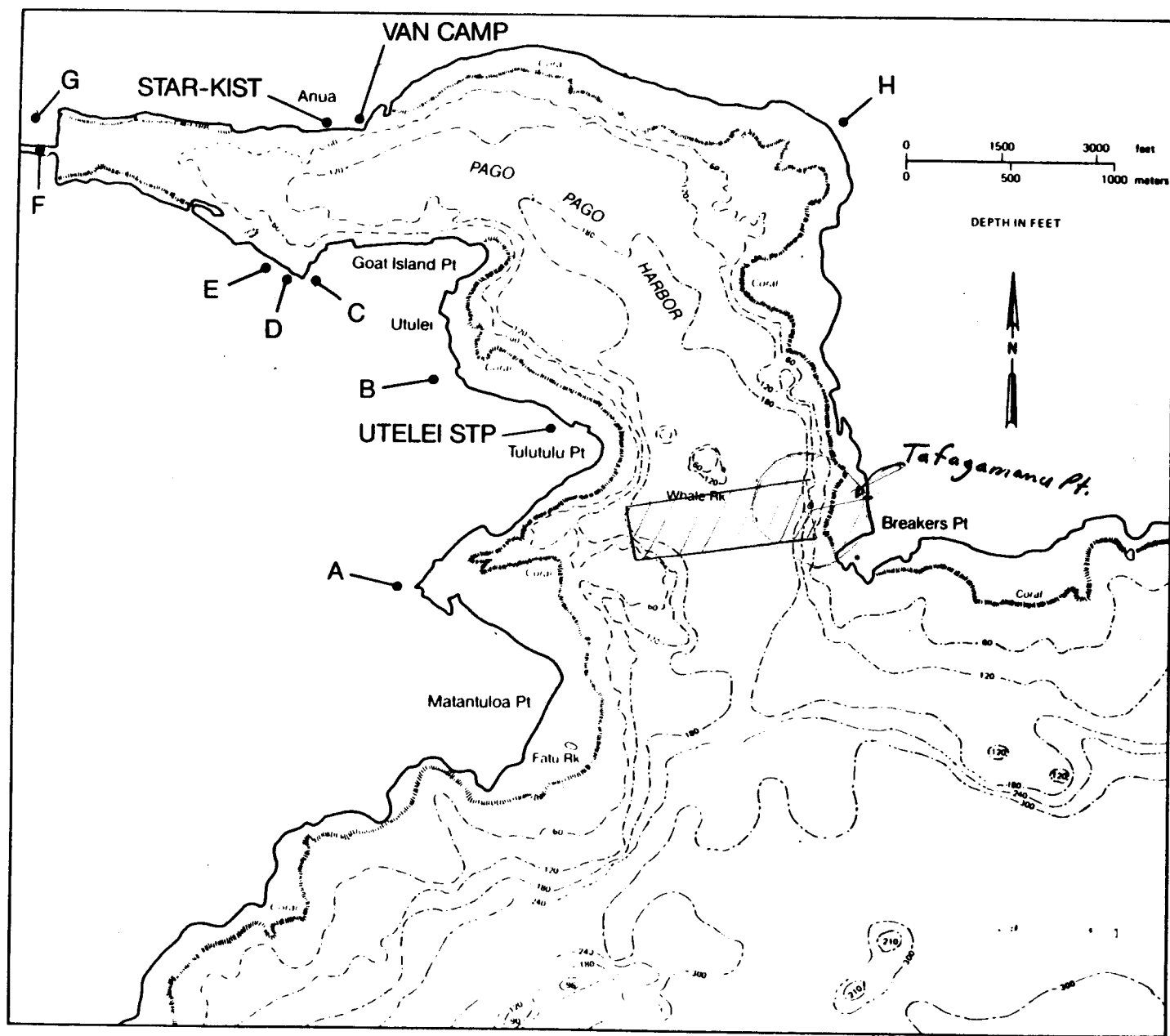
dia = 18"

Method 1 - piece-by-piece (conventional)
bottom full method

Method 2 -

$$2700000 \text{ ft}^2 = \frac{\pi D^2}{4}$$

$$D = 1854 \text{ ft}$$



**FIGURE 2-1
SAMPLING LOCATIONS**



| | | | |
|--|---------------------------------------|--|--|
| RECORD OF COMMUNICATION | | <input type="checkbox"/> PHONE CALL <input checked="" type="checkbox"/> DISCUSSION <input type="checkbox"/> FIELD TRIP <input type="checkbox"/> CONFERENCE <input type="checkbox"/> OTHER (SPECIFY) _____ | |
| (Record of item checked above) | | | |
| TO: M. Narvaez | FROM: Roger Yates Mike Blum | DATE 12/14/86 TIME P.M. | |
| SUBJECT NPOES Permit Nos. AS0000019, AS0000027 Estimated Construction Schedule for Canneries' outfall in Pago Pago Harbor (outer) | | | |
| SUMMARY OF COMMUNICATION <p>Asked for an estimate of time needed to design and construct an outfall for canneries into outer Pago Pago Harbor (total length 2.9 mi; 1500' into harbor; 18" diameter pipeline).</p> <p>Based on other construction in the area, subcontractors needed, etc., they estimated that 2 years would be a generous amount of time for construction (1½ - 2 yrs). At least 6 mos. would be necessary for design. The road would could progress at the same time as the outfall construction.</p> | | | |
| CONCLUSIONS, ACTION TAKEN OR REQUIRED <p>Will use this information to develop compliance schedule for canneries permits</p> | | | |
| 0112 | | | |
| INFORMATION COPIES TO: Files | | | |

12/9/86

Subject: Starbit NDES Permit - American Sarcos

From: GP

To: ~~Andy Livoff~~ Madonna

As a follow-up to my conversation w/ Ballant on 12/4/86, we discussed the following:

- 1) Regulated permit issuance - early to mid January, 1987.
- 2) Discharge of non-process waste via 002 - EGC has certified, conditionally, on the permit is possibility discharge of non-process waste via 002. Ballant had not received the letter - we are sending a copy to Ballant today. He had no problem w/ the technical feasibility of bypassing the treatment units for the non-process waste.
- 3) Storm water - Ballant stated he felt Starbit should not be required to monitor storm water, especially since significant amounts originate from outside their property. I noted that we are especially concerned about process waste water comingling w/ storm water and that this component should be controlled via the storm water ^{discharge} ~~permit~~ component of the ~~001~~ ⁰¹¹³ T. ~~the~~

CC = W-1-1

Lincoff

①

July: Starkist NADP Permit - American Samoa
from: HP

To: Andy Lincoff

Dave Ballardo of Starkist (213-590-3867)
called to ask some question about the
NADP permit:

(1) When do we project final issuance?

(2) For the non-process water discharge, there
are no MXP limits. There is a temp.
limitation for which a zone of mixing will
be required to attain w.g. stds. If
they get a zone of mixing, will that
also apply for MXP in the non-
process water discharge? (The ~~discharge~~
would also ~~apply to~~ include storm
water).

(3) If they can't get a zone of mixing for
non-process waste water, they do not
want a 002 outfall in the permit or
they won't be able to meet the limits.

0114

They also would have no storm water
for their permit, according to Ballardo,
because the storm water originating
on their property is non-plant (over)

originally storm water & they wouldn't
be required to have a part for
the consent - there is a substantial
amount of storm water originally from
property beyond their own property for
which they claim no responsibility.

I need to discuss ~~the~~ these issues
with you & Madonna & OTP before
returning the call to Ballantyne.

HP

FACT SHEET

NPDES Permit No. AS0000019 Star-Kist Samoa

Description of Discharge

The Star-Kist Samoa tuna cannery is located on Tutuila Island, American Samoa. Process discharges from the cannery enter Pago Pago Harbor at 14°16'37" South latitude and 170°41'10" West longitude. Storm water discharges enter the harbor at 14°16'37" South latitude and 170°41'12" West longitude. The cannery receives whole tuna which is processed into canned tuna and dried fish meal. Waste streams from this operation consist mainly of fish waste, fresh water, and sea water which are treated by the Dissolved Air Flotation (DAF) process. The DAF sludge is barged to sea for disposal. Approximately 500 tons of fish are processed per day. The resultant discharge is 2.08 MGD.

BCT Determination

The Clean Water Act (the Act) requires compliance with effluent limitations based on the application of Best Conventional Pollutant Control Technology (BCT) no later than July 1, 1984. On July 9, 1986, EPA published final effluent guidelines in the Federal Register which set BCT limits for tuna processing equal to Best Practicable Control Technology (BPT).

Effluent Limitations

The effluent limits set forth in this permit are based on BCT as outlined above. In addition, the permit imposes more stringent final and interim limits in order to bring the discharge into compliance with the Pago Pago Harbor water quality standards. The BCT limits are based on effluent guidelines for tuna processing found at 40 CFR §408 Subpart N. These guidelines contain limits for total suspended solids (TSS), oil and grease (O&G), and pH. The BCT effluent limits must be met immediately. The interim limits may be met by

eliminating the high strength press and precooker waste streams from the effluent. These interim limits for nitrogen and phosphorus are based on the increased pollutant control available with waste stream segregation. The interim limits must be met within 12 months. Final limits for total nitrogen and total phosphorus are imposed after three years to ensure that these pollutants do not cause violations of water quality standards in the receiving waters.

Calculation of Effluent Limits

All waste streams, including dryer scrubber water, boiler blowdown, and retort cooling water must be treated and discharged through the process water outfall 001. Waste streams proposed for discharge from outfall 002 in the permit application contain small amounts of nitrogen and phosphorus and are not likely to contribute significantly to aggravated violation of water quality standards for these parameters if discharged without treatment. However, the high temperature of these waste streams would violate the water quality standards for temperature. Mixing this thermal discharge in the process discharge will lessen its impact on the receiving water. Storm water may be discharged through the non-process outfall 002.

Effluent limitations for the process waste discharge were calculated based on the total flow rates reported in the permit application:

| <u>Maximum</u> | <u>Monthly Average</u> |
|----------------|------------------------|
| 3.7 MGD | 2.08 MGD |

Technology-Based Limits

BCT limits for TSS and O&G are based on the production rate applied for by the permittee, and the production-based factors promulgated in the BPT effluent guidelines for the tuna processing point source category. These factors are given as Discharge Limitations in the permit along with mass limitations based on an estimated production rate of 500 tons per day. These BCT limits must be met immediately.

Final Limits Based on Water Quality Standards

The Act also requires that the discharge comply with effluent limitations based on any water quality standards applicable to the receiving waters. In 1981, the American Samoa Government adopted, and EPA approved, Water Quality Standards for American Samoa which contain numerical limits for pollutant concentrations allowed in the waters of Pago

Pago Harbor. Water quality limitations for nitrogen, phosphorus, and temperature are shown in the following table:

| <u>Parameter</u> | <u>Median not to exceed given value</u> | <u>Not to exceed given value 10% of the time</u> | <u>Not to exceed given value 2% of the time</u> |
|------------------|---|--|---|
| Total N (mg/1) | 0.20 | 0.35 | 0.50 |
| Total P (mg/1) | 0.03 | 0.06 | 0.09 |

Temperature shall not exceed 85° F at any time.

The pH range shall be 6.5 to 8.6 and be within 0.2 pH units of that which would occur naturally.

These limits must be met within three years. Part III.C. of the permit allows the permit to be reopened and modified to include new limits if the American Samoa water quality standards are revised or if the American Samoa Government grants the permittee a zone of mixing.

Interim Limits

Interim limits are imposed to ensure that progress is made towards compliance with water quality standards. These interim limits may be met by the use of DAF treatment and segregation of high strength press and precooker waters from the plant effluent for disposal at sea. The "Joint Study of Fish Cannery Wastewater Effluent Loading Reduction at Pago Pago Harbor, American Samoa" prepared by CH2M Hill in 1984 discusses this treatment method in depth and strongly suggests its implementation. It is a simple method which would significantly improve the water quality of the harbor. Implementation of this technology is economically reasonable, and results in a discharge similar to that of tuna processing facilities which employ a solubles plant to recover oils from the high strength tuna processing waters. This level of treatment can be accomplished with simple in-plant control modifications. Implementation requires modifications to plant waste water conveyances, which will remove the press and precooker waters from the DAF influent, construction of new tankage to store this flow, and use of a waste transport vessel which has adequate capacity to carry the increased waste volume. These limits must be met within 12 months of issuance of the permit.

Calculation of Interim Limits

The interim nitrogen limits are based on the elimination of press and precooker nitrogen loads from the discharge. The limits are calculated as the reported nitrogen effluent load less the nitrogen reduction predicted as shown below:

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| <u>Flow</u> | <u>Effluent N Load (lbs/day)³</u> | <u>N Fraction Contributed by Press & Precooker¹</u> | <u>Press & Precooker N Load (lbs/day)</u> | <u>DAF Treatment Efficiency²</u> | <u>Effluent N Reduction (lbs/day)</u> |
|--------------------|--|--|---|---|---|
| Daily Maximum | 6,713 | 0.60 | 4,028 | 40% | 2,417 |
| Monthly Average | 3,505 | 0.60 | 2,103 | 40% | 1,262 |

The interim phosphorus limits are calculated similarly:

| <u>Flow</u> | <u>Effluent P Load (lbs/day)³</u> | <u>P Fraction Contributed by Press & Precooker¹</u> | <u>Press & Precooker P Load (lbs/day)</u> | <u>DAF Treatment Efficiency²</u> | <u>Effluent P Reduction (lbs/day)</u> |
|--------------------|--|--|---|---|---|
| Daily Maximum | 1,178 | 0.60 | 707 | 40% | 424 |
| Monthly Average | 685 | 0.60 | 411 | 40% | 247 |

(Since DAF treatment removes 40% of all nitrogen and phosphorus from the waste water, we can expect that a given reduction of these pollutants to the DAF units would result in an effluent reduction equal to 60% of the influent reduction. So, the incremental nutrient reduction in implementing waste stream segregation is 60% of the nutrient load of the two segregated streams.)

The limits are calculated as the reported effluent loads less the predicted reductions as shown below:

| <u>Flow</u> | <u>Reported N load³</u> | <u>Predicted N reduction</u> | <u>Nitrogen Effluent limit</u> |
|---------------|------------------------------------|----------------------------------|--------------------------------------|
| Daily Maximum | 6,713 lbs/day | 2,417 lbs/day | 4,300 lbs/day |
| Monthly Ave. | 3,505 lbs/day | 1,262 lbs/day | 2,200 lbs/day |
| <u>Flow</u> | <u>Reported P load³</u> | <u>Predicted P reduction</u> | <u>Phosphorus Effluent limit</u> |
| Daily Maximum | 1,178 lbs/day | 424 lbs/day | 750 lbs/day |
| Monthly Ave. | 685 lbs/day | 247 lbs/day | 440 lbs/day |

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The interim limits must be met within 12 months of issuance of the permit.

Schedule of Compliance

The permit's schedule of compliance requires the permittee to bring the discharges into compliance with water quality standards within three years. Part I.B.1-3 describes the steps necessary to reach compliance within three years. The permit may be reopened and modified to include new effluent limits based on the results of Part I.B.3.

pH

The effluent limits for pH are based on water quality standards for Pago Pago Harbor. The 1% pH rule as specified in 40 CFR 401.17 can be applied to these limits as requested in the permit application since the applicant is required to monitor continuously for pH. These limits must be met immediately.

Storm Water Limits

As explained earlier, the non process flows, such as the dryer scrubber water, may not be separated from the process flows. Only storm water may be discharged from Outfall Serial No. 002. Monitoring requirements for the storm water discharge 002 are based on water quality standards. The limit of 15 mg/l oil and grease is imposed to prevent the presence of visible oil and grease in the receiving water.

Additional Monitoring Requirements

Toxic substances and receiving water monitoring are required to document the effects on the beneficial uses of the receiving waters and to determine compliance with NPDES permit conditions.

The permit requires that the cannery effluent be sampled and reported twice yearly at Outfall Serial No. 001 and Outfall Serial No. 002 for cadmium, chromium, lead, mercury and zinc, toxic substances as contained in Table III, Appendix D of 40 CFR 122. These could be present in the effluent as a result of the canmaking and can washing activities associated with tuna processing. Monitoring is required to ensure compliance with water quality standards.

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Part I.A.6.b. of the permit also requires the permittee to continue to participate in the monitoring program in Pago Pago Harbor established by the American Samoan Government. This monitoring program is necessary to gather more data on Pago Pago Harbor, in order to document the effects of the discharges resulting from in-plant modifications on the receiving waters. Monitoring is required to determine compliance with the water quality standards.

Procedures for Decision Making

Notice of the Regional Administrator's intent to issue this permit is being sent to _____ as required by regulations at 40 CFR 124.10. Anyone wishing to comment on the proposed permit may do so in writing for a period of 30 days following the date of public notice. The comment period may be extended at the discretion of the Regional Administrator. Comments should be addressed to:

Madonna Narvaez (W-5-1)
EPA Region 9
215 Fremont Street
San Francisco, CA 94105

Comments must be received by _____

Any interested party may request that a public hearing be held concerning this proposed action. Requests must be in writing and must be received during the 30 day comment period.

For further information, please contact Madonna Narvaez at (415) 974-7427.

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REFERENCES

1. CH2M Hill. 1984. Joint Study of Fish Cannery Wastewater Effluent Loading Reduction at Pago Pago Harbor, American Samoa. Page 3-19. November, 1984.
2. CH2M Hill. 1984. Joint Study of Fish Cannery Wastewater Effluent Loading Reduction at Pago Pago Harbor, American Samoa. Page 3-7. November, 1984.
3. Star-Kist Samoa. Permit Application. December 19, 1984.

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FACT SHEET

NPDES Permit No. AS0000019 Star-Kist Samoa

Description of Discharge

The Star-Kist Samoa tuna cannery is located on Tutuila Island, American Samoa. Process discharges from the cannery enter Pago Pago Harbor at 14°16'37" South latitude and 170°41'10" West longitude. Storm water discharges enter the harbor at 14°16'37" South latitude and 170°41'12" West longitude. The cannery receives whole tuna which is processed into canned tuna and dried fish meal. Waste streams from this operation consist mainly of fish waste, fresh water, and sea water which are treated by the Dissolved Air Flotation (DAF) process. The DAF sludge is barged to sea for disposal. Approximately 500 tons of fish are processed per day. The resultant discharge is 2.08 MGD.

BCT Determination

The Clean Water Act (the Act) requires compliance with effluent limitations based on the application of Best Conventional Pollutant Control Technology (BCT) no later than July 1, 1984. On July 9, 1986, EPA published final effluent guidelines in the Federal Register which set BCT limits for tuna processing equal to Best Practicable Control Technology (BPT).

Effluent Limitations

The effluent limits set forth in this permit are based on BCT as outlined above. In addition, the permit imposes more stringent final and interim limits in order to bring the discharge into compliance with the Pago Pago Harbor water quality standards. The BCT limits are based on effluent guidelines for tuna processing found at 40 CFR 5408 Subpart N. These guidelines contain limits for total suspended solids (TSS), oil and grease (O&G), and pH. The BCT effluent limits must be met immediately. The interim limits may be met by

Mr. Conner

| | | | |
|---------|---------|------------|------------|
| Symbol | W-5-1 | W-5-1 | W-5 |
| Surname | Harvey | Sutherland | Sutherland |
| Date | 8/13/86 | 8/14/86 | 8/14/86 |

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June 8/15/86

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eliminating the high strength press and precooker waste streams from the effluent. These interim limits for nitrogen and phosphorus are based on the increased pollutant control available with waste stream segregation. The interim limits must be met within 12 months. Final limits for total nitrogen and total phosphorus are imposed after three years to ensure that these pollutants do not cause violations of water quality standards in the receiving waters.

Calculation of Effluent Limits

All waste streams, including dryer scrubber water, boiler blowdown, and retort cooling water must be treated and discharged through the process water outfall 001. Waste streams proposed for discharge from outfall 002 in the permit application contain small amounts of nitrogen and phosphorus and are not likely to contribute significantly to aggravated violation of water quality standards for these parameters if discharged without treatment. However, the high temperature of these waste streams would violate the water quality standards for temperature. Mixing this thermal discharge in the process discharge will lessen its impact on the receiving water. Storm water may be discharged through the non-process outfall 002.

Effluent limitations for the process waste discharge were calculated based on the total flow rates reported in the permit application:

| <u>Maximum</u> | <u>Monthly Average</u> |
|----------------|------------------------|
| 3.7 MGD | 2.08 MGD |

Technology-Based Limits

BCT limits for TSS and O&G are based on the production rate applied for by the permittee, and the production-based factors promulgated in the PPT effluent guidelines for the tuna processing point source category. These factors are given as Discharge Limitations in the permit along with mass limitations based on an estimated production rate of 500 tons per day. These BCT limits must be met immediately.

Final Limits Based on Water Quality Standards

The Act also requires that the discharge comply with effluent limitations based on any water quality standards applicable to the receiving waters. In 1981, the American Samoa Government adopted, and EPA approved, Water Quality Standards for American Samoa which contain numerical limits for pollutant concentrations allowed in the waters of Pago

Pago Harbor. Water quality limitations for nitrogen, phosphorus, and temperature are shown in the following table:

| <u>Parameter</u> | <u>Median not to exceed given value</u> | <u>Not to exceed given value 10% of the time</u> | <u>Not to exceed given value 2% of the time</u> |
|------------------|---|--|---|
| Total N (mg/l) | 0.20 | 0.35 | 0.50 |
| Total P (mg/l) | 0.03 | 0.06 | 0.09 |

Temperature shall not exceed 85° F at any time.

The pH range shall be 6.5 to 8.6 and be within 0.2 pH units of that which would occur naturally.

These limits must be met within three years. Part III.C. of the permit allows the permit to be reopened and modified to include new limits if the American Samoa water quality standards are revised or if the American Samoa Government grants the permittee a zone of mixing.

Interim Limits

Interim limits are imposed to ensure that progress is made towards compliance with water quality standards. These interim limits may be met by the use of DAF treatment and segregation of high strength press and precooker waters from the plant effluent for disposal at sea. The "Joint Study of Fish Cannery Wastewater Effluent Loading Reduction at Pago Pago Harbor, American Samoa" prepared by CP2M Hill in 1984 discusses this treatment method in depth and strongly suggests its implementation. It is a simple method which would significantly improve the water quality of the harbor. Implementation of this technology is economically reasonable, and results in a discharge similar to that of tuna processing facilities which employ a solubles plant to recover oils from the high strength tuna processing waters. This level of treatment can be accomplished with simple in-plant control modifications. Implementation requires modifications to plant waste water conveyances, which will remove the press and precooker waters from the DAF influent, construction of new tankage to store this flow, and use of a waste transport vessel which has adequate capacity to carry the increased waste volume. These limits must be met within 12 months of issuance of the permit.

Calculation of Interim Limits

The interim nitrogen limits are based on the elimination of press and precooker nitrogen loads from the discharge. The limits are calculated as the reported nitrogen effluent load less the nitrogen reduction predicted as shown below:

| <u>Flow</u> | <u>Effluent N Load (lbs/day)³</u> | <u>N Fraction Contributed by Press & Precooker¹</u> | <u>Press & Precooker N Load (lbs/day)</u> | <u>DAF Treatment Efficiency²</u> | <u>Effluent N Reduction (lbs/day)</u> |
|-----------------|--|--|---|---|---------------------------------------|
| Daily Maximum | 6,713 | 0.60 | 4,028 | 40% | 2,417 |
| Monthly Average | 3,505 | 0.60 | 2,103 | 40% | 1,262 |

The interim phosphorus limits are calculated similarly:

| <u>Flow</u> | <u>Effluent P Load (lbs/day)³</u> | <u>P Fraction Contributed by Press & Precooker¹</u> | <u>Press & Precooker P Load (lbs/day)</u> | <u>DAF Treatment Efficiency²</u> | <u>Effluent P Reduction (lbs/day)</u> |
|-----------------|--|--|---|---|---------------------------------------|
| Daily Maximum | 1,178 | 0.60 | 707 | 40% | 424 |
| Monthly Average | 685 | 0.60 | 411 | 40% | 247 |

(Since DAF treatment removes 40% of all nitrogen and phosphorus from the waste water, we can expect that a given reduction of these pollutants to the DAF units would result in an effluent reduction equal to 60% of the influent reduction. So, the incremental nutrient reduction in implementing waste stream segregation is 60% of the nutrient load of the two segregated streams.)

The limits are calculated as the reported effluent loads less the predicted reductions as shown below:

| <u>Flow</u> | <u>Reported N load³</u> | <u>Predicted N reduction</u> | <u>Nitrogen Effluent limit</u> |
|---------------|------------------------------------|------------------------------|----------------------------------|
| Daily Maximum | 6,713 lbs/day | 2,417 lbs/day | 4,300 lbs/day |
| Monthly Ave. | 3,505 lbs/day | 1,262 lbs/day | 2,200 lbs/day |
| <u>Flow</u> | <u>Reported P load³</u> | <u>Predicted P reduction</u> | <u>Phosphorus Effluent limit</u> |
| Daily Maximum | 1,178 lbs/day | 424 lbs/day | 750 lbs/day |
| Monthly Ave. | 685 lbs/day | 247 lbs/day | 440 lbs/day |

The interim limits must be met within 12 months of issuance of the permit.

Schedule of Compliance

The permit's schedule of compliance requires the permittee to bring the discharges into compliance with water quality standards within three years. Part I.B.1-3 describes the steps necessary to reach compliance within three years. The permit may be reopened and modified to include new effluent limits based on the results of Part I.B.3.

pH

The effluent limits for pH are based on water quality standards for Pago Pago Harbor. The 1% pH rule as specified in 40 CFR 401.17 can be applied to these limits as requested in the permit application since the applicant is required to monitor continuously for pH. These limits must be met immediately.

Storm Water Limits

As explained earlier, the non process flows, such as the dryer scrubber water, may not be separated from the process flows. Only storm water may be discharged from Outfall Serial No. 002. Monitoring requirements for the storm water discharge 002 are based on water quality standards. The limit of 15 mg/l oil and grease is imposed to prevent the presence of visible oil and grease in the receiving water.

Additional Monitoring Requirements

Toxic substances and receiving water monitoring are required to document the effects on the beneficial uses of the receiving waters and to determine compliance with NPDES permit conditions.

The permit requires that the cannery effluent be sampled and reported twice yearly at Outfall Serial No. 001 and Outfall Serial No. 002 for cadmium, chromium, lead, mercury and zinc, toxic substances as contained in Table III, Appendix D of 40 CFR 122. These could be present in the effluent as a result of the canmaking and can washing activities associated with tuna processing. Monitoring is required to ensure compliance with water quality standards.

Part I.A.6.b. of the permit also requires the permittee to continue to participate in the monitoring program in Pago Pago Harbor established by the American Samoan Government. This monitoring program is necessary to gather more data on Pago Pago Harbor, in order to document the effects of the discharges resulting from in-plant modifications on the receiving waters. Monitoring is required to determine compliance with the water quality standards.

Procedures for Decision Making

Notice of the Regional Administrator's intent to issue this permit is being sent to

as required by regulations at 40 CFR 124.10. Anyone wishing to comment on the proposed permit may do so in writing for a period of 30 days following the date of public notice. The comment period may be extended at the discretion of the Regional Administrator. Comments should be addressed to:

Madonna Narvaez (W-5-1)
EPA Region 9
215 Fremont Street
San Francisco, CA 94105

Comments must be received by

Any interested party may request that a public hearing be held concerning this proposed action. Requests must be in writing and must be received during the 30 day comment period.

For further information, please contact Madonna Narvaez at (415) 974-7427.

REFERENCES

1. CH2M Hill. 1984. Joint Study of Fish Cannery Wastewater Effluent Loading Reduction at Pago Pago Harbor, American Samoa. Page 3-19. November, 1984.
2. CH2M Hill. 1984. Joint Study of Fish Cannery Wastewater Effluent Loading Reduction at Pago Pago Harbor, American Samoa. Page 3-7. November, 1984.
3. Star-Kist Samoa. Permit Application. December 19, 1984.

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Permit No. AS0000019

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et. seq.; the "Act"),

Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, Tutuila
American Samoa 96799

is authorized to discharge

tuna processing wastewater (discharge 001 at 14° 16' 37" S latitude,
170° 41' 10" W longitude)

storm water (discharge 002 at 14° 16' 37" S latitude,
170° 41' 12" longitude)

from the Star-Kist Samoa Tuna Cannery located at Pago Pago, American Samoa to receiving waters named Pago Pago Harbor

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III hereof.

This permit shall become effective on , 1986.

This permit and the authorization to discharge shall expire at midnight, , 1991.

Signed this day of , 1986

For the Regional Administrator

Director, Water Management Division

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Permit No. AS0000019

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (based on a maximum production rate of 500 tons/day of seafood processed and an approximate flow rate of 2.08 MGD)

1. During the period beginning with the effective date of this permit and lasting through (12 months), the permittee is authorized to discharge from Outfall Serial No. 001 (tuna processing wastewater).

- a. Such discharges shall be limited and monitored by the permittee as specified below:

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> | | | <u>Monitoring Requirements</u> | |
|---|--|----------------------|--|--------------------------------|--------------------|
| | <u>loading</u> | | <u>concentration</u> | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| | <u>Monthly Average</u> | <u>Daily Maximum</u> | <u>in mg/l</u> <u>Monthly Average</u> | | |
| Flow (MGD) | (d) | (d) | - | Continuous | Continuous |
| Temperature (°F) | (d) | 90 | - | Continuous | Continuous |
| pH (Standard Units) | (e) Not less than 6.5 and not greater than 8.6 | | | Continuous | Continuous |
| Total Suspended Solids (lbs/day) | 3,300 | 8,300 | (d) | Twice weekly | Composite |
| Total Suspended Solids (lbs/1000 lbs seafood) | 3.3 | 8.3 | | Twice weekly | Calculated |
| Oil and Grease (a) (b) (lbs/day) | 840 | 2,100 | (d) | Twice weekly | Composite |
| Oil and Grease (a) (b) (lbs/1000 lbs seafood) | 0.84 | 2.1 | - | Twice weekly | Calculated |
| Total Nitrogen (b) (lbs/day) | (d) | (d) | (d) | Twice weekly | Composite |
| Total Phosphorus (b) (lbs/day) | (d) | (d) | (d) | Twice weekly | Composite |

(a) The test procedure for the analysis of oil and grease shall comply with the method described in the manual of "Methods for Chemical Analysis of Water and Wastes," 1974, EPA, Methods Development and Quality Assurance Research Laboratory, page 229 (with written EPA approval for non-substantive changes) or an alternate procedure approved in accordance with the procedures specified in regulations published pursuant to Section 304(h) of the Act.

(b) Samples shall be taken concurrently.

(d) Reporting required only.

(e) The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and no individual excursions from the range of pH values shall exceed 60 minutes.

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Permit No. AS0000019

PART I

- A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (based on a maximum production rate of 500 tons/day of seafood processed and an approximate flow rate of 2.08 MGD)
2. During the period beginning (12 months) and lasting through (3 years), the permittee is authorized to discharge from Outfall Serial No. 001 (tuna processing wastewater).
- a. Such discharges shall be limited and monitored by the permittee as specified below:

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> | | | <u>Monitoring Requirements</u> | |
|---|--|----------------------|--|--------------------------------|--------------------|
| | <u>loading</u> | | <u>concentration</u> | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| | <u>Monthly Average</u> | <u>Daily Maximum</u> | <u>in mg/l</u> <u>Monthly Average</u> | | |
| Flow (MGD) | (d) | (d) | - | Continuous | Continuous |
| Temperature (°F) | (d) | 90 | - | Continuous | Continuous |
| pH (Standard Units) | (e) Not less than 6.5 and not greater than 8.6 | | | Continuous | Continuous |
| Total Suspended Solids (lbs/day) | 3,300 | 8,300 | (d) | Twice weekly | Composite |
| Total Suspended Solids (lbs/1000 lbs seafood) | 3.3 | 8.3 | - | Twice weekly | Calculated |
| Oil and Grease (a)(b) (lbs/day) | 840 | 2,100 | (d) | Twice weekly | Composite |
| Oil and Grease (a)(b) (lbs/1000 lbs seafood) | 0.84 | 2.1 | - | Twice weekly | Calculated |
| Total Nitrogen (b) (lbs/day) | 2,200 | 4,300 | (d) | Twice weekly | Composite |
| Total Phosphorus (b) (lbs/day) | 440 | 750 | (d) | Twice weekly | Composite |

(a) The test procedure for the analysis of oil and grease shall comply with the method described in the manual of "Methods for Chemical Analysis of Water and Wastes," 1974, EPA, Methods Development and Quality Assurance Research Laboratory, page 229 (with written EPA approval for non-substantive changes) or an alternate procedure approved in accordance with the procedures specified in regulations published pursuant to Section 304(h) of the Act.

(b) Samples shall be taken concurrently.

(d) Reporting required only.

(e) The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and no individual excursions from the range of pH values shall exceed 60 minutes.

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PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (based on a maximum production rate of 500 tons/day of seafood processed and an approximate flow rate of 2.08 MGD)

3. During the period beginning with (3 years) and lasting through (five years), the permittee is authorized to discharge from Outfall Serial No. 001 (tuna processing wastewater).

a. Such discharges shall be limited and monitored by the permittee as specified below:

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> | | | <u>Monitoring Requirements</u> | |
|---|--|----------------------|------------------------|--------------------------------|--------------------|
| | <u>loading</u> | | <u>concentration</u> | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| | <u>Monthly Average</u> | <u>Daily Maximum</u> | <u>Monthly Average</u> | | |
| Flow (MGD) | (d) | (d) | - | Continuous | Continuous |
| Temperature (°F) | (d) | 85 | - | Continuous | Continuous |
| pH (Standard Units) | (e) Not less than 6.5 and not greater than 8.6 | | | Continuous | Continuous |
| Total Suspended Solids (lbs/day) | 3,300 | 8,300 | (d) | Twice weekly | Composite |
| Total Suspended Solids (lbs/1000 lbs seafood) | 3.3 | 8.3 | - | Twice weekly | Calculated |
| Oil and Grease (a)(b) (lbs/day) | 840 | 2,100 | (d) | Twice weekly | Composite |
| Oil and Grease (a)(b) (lbs/1000 lbs seafood) | 0.84 | 2.1 | - | Twice weekly | Calculated |
| Total Nitrogen (b)(c) | - | - | 0.20 | Twice weekly | Composite |
| Total Phosphorus (b)(c) | - | - | 0.03 | Twice weekly | Composite |

(a) The test procedure for the analysis of oil and grease shall comply with the method described in the manual of "Methods for Chemical Analysis of Water and Wastes," 1974, EPA, Methods Development and Quality Assurance Research Laboratory, page 229 (with written EPA approval for non-substantive changes) or an alternate procedure approved in accordance with the procedures specified in regulations published pursuant to Section 304(h) of the Act.

(b) Samples shall be taken concurrently.

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(c) Median monthly value may not exceed the given limitation. In addition, 10% of the sample results obtained during the month may not exceed 0.35 mg/1 for total nitrogen, or 0.06 mg/1 for total phosphorus.

(d) Reporting required only.

(e) The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and no individual excursions from the range of pH values shall exceed 60 minutes.

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Permit No. AS0000019

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning with the effective date of this permit and lasting through (five years), the permittee is authorized to discharge from Outfall Serial No. 002 (storm water).

- a. Such discharges shall be limited and monitored by the permittee as specified below:

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> | | | <u>Monitoring Requirements</u> | |
|--------------------------------|------------------------------|----------------------|------------------------|--------------------------------|--------------------|
| | <u>loading</u> | | <u>concentration</u> | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| | <u>Monthly Average</u> | <u>Daily Maximum</u> | <u>Monthly Average</u> | | |
| Temperature (°F) | - | - | 85 | Twice Monthly | Composite |
| Turbidity (NTU)(c) | - | - | 0.75 | Twice Monthly | Composite |
| Oil and Grease (a)(b) | - | - | 15 | Twice Monthly | Composite |

(a) The test procedure for the analysis of oil and grease shall comply with the method described in the manual of "Methods for Chemical Analysis of Water and Wastes," 1974, EPA, Methods Development and Quality Assurance Research Laboratory, page 229 (with written EPA approval for non-substantive changes) or an alternate procedure approved in accordance with the procedures specified in regulations published pursuant to Section 304(h) of the Act.

(b) Samples shall be taken concurrently.

(c) Median monthly value may not exceed the given limitation. In addition, 10% of the sample results obtained during the month may not exceed 1.0 NTU for turbidity.

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5. During the period beginning with the effective date of this permit and lasting through (five years), the discharges from Outfall Serial No. 001 and Outfall Serial No. 002 shall also be limited as follows:

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge of Outfall Serial No. 001 and Outfall Serial No. 002. Effluent samples shall be taken downstream from the treatment works prior to mixing with the receiving waters.
- c. There shall be no discharge of toxic substances that violate the water quality standards for the Territory of American Samoa.
- d. The discharge shall not cause objectionable odors at the surface of the receiving waters.

6. Toxic Substance Monitoring Program

During the period beginning with the effective date of this permit and lasting through (five years), the discharges from Outfall Serial No. 001 and Outfall Serial No. 002 shall also be monitored as follows:

Cannery effluent shall be sampled and reported twice yearly at the discharges of Outfall Serial No. 001 and Outfall Serial No. 002 for cadmium, chromium, lead, mercury, and zinc.

7. Receiving Water Monitoring Program

The permittee, jointly with Samoa Packing Company (NPDES permit No. AS0000027), shall perform or cause to be performed, the following receiving water monitoring program established in Pago Pago Harbor.

| <u>Parameter</u> | <u>Units</u> | <u>Stations*</u> | <u>Frequency</u> | <u>Sample Type</u> |
|-------------------|----------------|------------------|------------------|--------------------|
| Temperature | °C | 5-13 | Quarterly | Discrete |
| pH | Standard Units | 5-13 | Quarterly | Discrete |
| Dissolved Oxygen | mg/L | 5-13 | Quarterly | Discrete |
| Suspended Solids | mg/L | 5-13 | Quarterly | Discrete |
| Light Penetration | ft | 5-13 | Quarterly | Discrete |
| Turbidity | NTU | 5-13 | Quarterly | Discrete |
| Salinity | ppt | 5-13 | Quarterly | Discrete |
| Total Nitrogen | ug/L | 5-13 | Quarterly | Discrete |
| Total Phosphorus | ug/L | 5-13 | Quarterly | Discrete |

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PART I
Page 8 of 23
Permit No. AS0000019

- * The station locations shall be the historical stations designated by the American Samoa Environmental Protection Agency. These measurements shall be taken at 3- foot and 60-foot depths with the exception of Station 13 where measurements shall be taken at the 3-foot and 30-foot depths.

8. Quality Assurance/Quality Control

All waste material sampling procedures, analytical protocols, and quality assurance/quality control procedures shall be performed in accordance with guidelines specified by EPA Region 9. The following references shall be used by the permittee where appropriate:

- a. EPA, 40 CFR 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act;
- b. Tetra Tech, Inc. 1985. Summary of U.S. EPA-approved methods, standard methods and other guidance for 301(h) monitoring variables. Final program document prepared for the Marine Operations Division, Office of Marine and Estuarine Protection, U.S. Environmental Protection Agency. EPA Contract No. 68-01-693. Tetra Tech, Inc., Bellevue, Wa.; and
- c. Tetra Tech, Inc. 1986. Quality assurance and quality control guidance for 301(h) monitoring programs. Final program document prepared for document prepared for the Marine Operations Division, Office of Marine and Estuarine Protection, U.S. Environmental Protection Agency. EPA Contract No. 68-01-3968. Tetra Tech, Inc., Bellevue, Wa.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall submit a report to EPA and the American Samoa Government (ASG) which describes and evaluates the alternatives for achieving compliance with the water quality standards of American Samoa. The alternatives shall be those chosen by the permittee in consultation with the ASG and capable of achieving compliance with the water quality standards within three years of the effective date of this permit. The selection of alternatives shall reflect any decision made by the ASG on the permittee's pending application for a mixing zone under paragraph V.B of the water quality standards and may also assume, with the concurrence of the ASG, technical modifications to paragraph V.B.g. of the water quality standards regarding methodology for calculating mixing zones as they may relate to consideration of far field dilution. The report shall be submitted no later than six months after the effective date of this permit.
2. The permittee shall select one of the alternatives described in the report to completed in I.B.1 and submit a schedule of implementation to EPA and ASG. The schedule shall specify, at a minimum:
 - a. The chosen alternative.
 - b. The date by which the permittee will apply to the ASG for a mixing zone, if a mixing zone would be needed to achieve compliance with the water quality standards.
 - c. The date by which any necessary facility modifications and/or new facility construction will be commenced.
 - d. The date by which the chosen alternative will be fully operational.
3. The schedule must be approved by both the EPA and ASG. Upon such approval, and notice and opportunity for public comment, the permit shall be reopened and modified to include schedule and the dates contained therein to bring the discharges into compliance with applicable water quality standards. The schedule shall be submitted no later than 12 months after the effective date of this permit.

4. The permittee shall comply with effluent limitations and conditions established in Parts I.A. and I.B.1.-I.B.3. in accordance with the following schedule of compliance.

The permittee shall:

- a. Achieve compliance with the effluent limits established in Parts I.A.1., I.A.4., and I.A.5. upon the effective date of this permit.
- b. Submit a report to EPA and Government of Samoa describing and evaluating alternatives for achieving within three years compliance with the water quality standards of American Samoa.....(6 mo + 14 days)
- c. Achieve compliance with the effluent limits established in Part I.A.2. by.....(12 months)
- d. Submit a report to EPA and Government of American Samoa confirming compliance with the Part I.A.2. effluent limits by....(12 mo + 14 days)
- e. Submit a schedule of implementation of the alternative selected in Part I.A.7 to EPA and Government of American Samoa.....(12 mo + 14 days)
- f. Submit a report to EPA and Government of American Samoa which evaluates progress towards achieving compliance with effluent limits necessary for achieving water quality standards set forth in Part I.A.3. by.....(2 years + 14 days)
- g. Achieve compliance with the effluent limits necessary for achieving water quality standards set forth in Part I.A.3. by.....(3 years)
- h. Submit a report to EPA and Government of American Samoa confirming compliance with the effluent limits necessary for achieving water quality standards set forth in Part I.A.3. by.....(3 years + 14 days)

C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

3. Penalties for Tampering

The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

4. Reporting of Monitoring Results

Monitoring results obtained during the previous 3 months shall be summarized for each month and submitted quarterly on forms to be supplied by the Regional Administrator, to the extent that the information reported may be entered on the forms. The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this permit. Unless otherwise specified, discharge flows shall be reported in terms of the average flow over each 30-day period and the maximum daily flow over that 30-day period. Monitoring reports shall be postmarked no later than the 28th day of the month following the completed reporting period. The first report is due on

Signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and the Government of American Samoa at the following address:

Regional Administrator
Environmental Protection Agency
Region 9, Attn: W-1-1
215 Fremont Street
San Francisco, CA 94105

Executive Secretary
Environmental Quality Commission
Government of American Samoa
Tutuila, Pago Pago
American Samoa 96920

5. Definitions

- a. The "monthly average" discharge means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the monthly average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.
- b. The "daily maximum" discharge means the total discharge by weight during any calendar day.
- c. A "discrete" sample means any individual sample collected in less than 15 minutes.
- d. A "composite sample" means a combination of no fewer than eight individual samples obtained at equal time intervals over the production period of the day of sampling. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling.
- e. "Seafood" means the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in the permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

7. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Regional Administrator in the permit.

8. Intermittent Discharge Monitoring

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the permittee shall monitor and record data for all the characteristics listed in the monitoring requirements, after which the frequencies of analysis listed in the monitoring requirements shall apply for the duration of each such intermittent discharge. In no event shall the permittee be required to monitor and record data more often than twice the frequencies listed in the monitoring requirements.

9. Monitoring Modification

Monitoring, analytical, and reporting requirements may be modified by the Regional Administrator upon due notice.

10. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit for a period of at least three (3) years from the date of the sample, measurement, or report. This period may be extended by request of the Regional Administrator at any time.

11. Records Content

Records of monitoring information shall include:

- a. The date, place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

12. Inspection and Entry

The permittee shall allow the Regional Administrator, or the Executive Secretary, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location. If samples are taken, the permittee shall be given split samples upon request.

D. REPORTING REQUIREMENTS

1. Anticipated Noncompliance

The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

2. Compliance Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

3. Monitoring Reports

Monitoring results shall be reported at the intervals specified in Part I.C.4. of this permit.

4. Twenty-Four Hour Reporting of Noncompliance

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following shall be included as information which must be reported within 24 hours:

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any upset which exceeds any effluent limitation in the permit; and
- c. Violation of a maximum daily discharge limitation for any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous substance, listed as such by the Regional Administrator in the permit to be reported within 24 hours.

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Part I.D.4. at the time monitoring reports are submitted. The reports shall contain the information listed in Part I.D.4.

6. Signatory Requirements

a. Applications. All permit applications shall be signed as follows:

- (1) For a corporation: by a responsible corporate officer. For the purposes of this section, a responsible corporate officer means (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (b) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) For a partnership or sole proprietorship: by a general partner or proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (a) the chief executive officer of the agency, or (b) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. Reports. All reports required by permits and other information requested by the Regional Administrator shall be signed by a person described in paragraph a. of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described in paragraph a. of this section;
- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and

(3) The written authorization is submitted to the Regional Administrator.

- c. Changes to authorization. If an authorization under paragraph b. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this section must be submitted to the Regional Administrator prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under paragraphs a. or b. of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7. Duty to Provide Information

The permittee shall furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Regional Administrator upon request, copies of records required to be kept by this permit.

8. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Administrator. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

9. Penalties for Falsification of Reports

The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

10. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR § 122.29 (b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR § 122.42 (a)(1).

PART II

A. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Definitions

- (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which are reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations

The permittees may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this section.

c. Notice

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, he shall submit prior notice, if possible, at least 10 days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part I.D.4. (24-hour notice).

d. Prohibition of bypass

- (1) Bypass is prohibited, and the Regional Administrator may take enforcement action against the permittee for bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxilliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (c) The permittee submitted notices as required under paragraph c. of this section.
- (2) The Regional Administrator may approve an anticipated bypass, after considering its adverse effects, if he determines that it will meet the three conditions listed above in paragraph d.(1) of this section.

4. Upset Conditions

a. Definition

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent Limitations if the requirements of paragraph c of this section are met. No determination made during administrative review of claims that noncompliance was caused by an upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the permittee can identify the the specific cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated;
- (3) The permittee submitted notice of the upset as required in Part I.D.4. (24-hour notice); and
- (4) The permittee complied with any remedial measures required under Part II.B.4. (duty to mitigate).

d. Burden of proof

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

B. GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

2. Duty to Comply with Toxic Effluent Standards

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

3. Penalties for Violation of Permit Conditions

The Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing sections 301, 302, 306, 307, or 308 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both.

4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or notification of planned changes and anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

Notwithstanding Part II.B.5. above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revoked and reissued or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

7. Transfers

This permit is not transferable to any person except after notice to the Regional Administrator. The Regional Administrator may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

8. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Regional Administrator.

9. Civil and Criminal Liability

Except as provided in permit conditions on "Bypasses" (Part II.A.3.) and "Upsets" (Part II.A.4.), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

10. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Act.

11. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

12. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property, or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

13. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART III

A. REAPPLICATION

If the permittee desires to continue an activity regulated by this permit after the expiration of the permit, the permittee must apply for and obtain a new permit.

B. NOTIFICATION REQUIREMENTS

The permittee must notify the Regional Administrator as soon as they know or have reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(a) One hundred micrograms per liter (100 ug/l);

(b) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21 (g)(9).

C. REOPENER

After notice and opportunity for public comment, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. The Government of American Samoa granting a zone of mixing;
- c. The results of the study, alternative, and schedule required in Part I; or
- d. Revisions to the American Samoa Water Quality Standards, including, but not limited to, revisions to the methodology used to determine compliance with water quality standards.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

August 15, 1986

Samoa News Ltd.
P.O. Box 57
Pago Pago, American Samoa 96799
Attn: Legal Advertisement Section

Dear Sir:

Enclosed is a copy of a public notice of a proposed action by the Environmental Protection Agency for:

Star-Kist Foods, Inc. and Samoa Packing Company, Inc.
National Pollutant Discharge Elimination
System (NPDES) Permits
Public Notice No. AS-86-1-W

Please schedule the enclosed public notice to appear in the Classified Advertisement, Legal Notice section, of your newspaper on Thursday, August 28, 1986 and for one time only.

The procedure for the request of payment is outlined in the attached advertising order form. Upon issuance of the public notice in your newspaper, please provide our office with two affidavits or proofs of publication. The two affidavits and a copy of the advertising order should be sent to the letterhead address, attention: Financial Management Office, P-4.

If you have any questions in this matter please call me at (415) 974-9526 or Danny Collier at (415) 974-7432.

Sincerely,

Patrick Chan
Permits and Pretreatment Section
Water Management Division

Enclosure

0152

cc: Pati Faiai, Environmental Quality Commission

CONCURRENCES

| | | | | | | | | |
|---------|---------|--|--|--|--|--|--|--|
| SYMBOL | W-5-1 | | | | | | | |
| SURNAME | Chan | | | | | | | |
| DATE | 8-15-86 | | | | | | | |

DHL Airbill No. 35532081

DEPARTMENT OR ESTABLISHMENT, BUREAU OR OFFICE
U.S. Environmental Protection Agency, Region 9

The publisher of the publication named below is authorized to publish the enclosed advertisement according to the schedule below provided the rates are not in excess of the commercial rates

charged to private individuals with the usual discounts. It is to be set solid, without paragraphing, and without any display in the heading unless otherwise expressly authorized in the specifications.

NAME OF THE PUBLICATION ADVERTISED IN

Samoa News Ltd., P.O. Box 57, Pago Pago, American Samoa, 96799

SUBJECT OF ADVERTISEMENT

Public Notice No. GU-86-4-W

EDITION OF PAPER ADVERTISEMENT APPEARED
N/A

NUMBER OF TIMES ADVERTISEMENT APPEARED

One Time Only

DATE(s) ADVERTISEMENT APPEARED

August 28, 1986

SPECIFICATIONS FOR ADVERTISEMENT

PLEASE NOTE: PAYMENT CANNOT BE MADE UNTIL THE BACK OF THIS FORM IS COMPLETED.
ALSO SUBMIT TWO (2) COPIES OF AFFIDAVIT OF PUBLICATION.

If you have any questions please call Patrick Chan at (415) 974-9256.

COPY FOR ADVERTISEMENT

SEE ATTACHED.

Accounting Data

| CC10-14 | DCN CC15-20 | ORDER NO. CC21-30 | ACCT. NO. CC31-40 | OC | ESTIMATED COST | FC |
|---------|----------------|----------------------|----------------------|------|----------------|----|
| 0501 | W20105 | 0000 0C0003 | 6A4909L000 | 2540 | \$200.00 | N |

| AUTHORITY TO ADVERTISE | | INSTRUMENT OF ASSIGNMENT | |
|-----------------------------------|--|--|--|
| NUMBER EPA Order 1210.5a | | NUMBER N/A | |
| DATE December 13, 1973 | | DATE N/A | |
| SIGNATURE OF AUTHORIZING OFFICIAL | | TITLE Chief, Support Service Branch | |

INSTRUCTIONS TO PUBLISHERS

Extreme care should be exercised to insure that the specifications for advertising to be set other than solid be definite, clear, and specific since no allowance will be made for paragraphing or for display or leaded or prominent headings, unless specifically ordered, or for additional space required by the use of type other than that specified. Specifications for advertising other than solid and the advertisement copy submitted to the publisher will be attached to the voucher. The following is a sample of solid line advertisement set up in accordance with the usual Government requirements.

DEPARTMENT OF HIGHWAYS & TRAFFIC.
D.C. Bids are requested for first spring 1966 cement concrete repair contract, including incidental work, Washington, D.C., Invitation No. C-5576-H, consisting of 11,000 sq. yds. PCC Class BB sidewalk repair and 2,000 cu. yds. PCC Class A pavement, alley, & driveway repair, both cut repairs only. Bidding material available from the Procurement Officer, D.C. Sealed bids to be opened in the Procurement Office at 3:00 p.m., November 15, 1965.

Your bill for this advertising order should be submitted on the "Public Voucher for Advertising" form, which is printed on the reverse of this form, immediately after the last publication of the advertisement. If copies of the printed advertisement are not available, complete the affidavit provided on the voucher. Submit the voucher and a copy of the printed advertisement to
U.S. Environmental Protection Agency

Financial Management Office (P-4)
215 Fremont Street, San Francisco, CA 94105
IMPORTANT

Charges for advertising when a cut, matrix, stereotype or electrotype is furnished will be based on actual space used and no allowance will be made for shrinkage.

In no case shall the advertisement extend beyond the date and edition stated in this order.

PURCHASING VOUCHER FOR ADVERTISING

| | | |
|---|--|----------------------------|
| DEPARTMENT OR ESTABLISHMENT, BUREAU OR OFFICE | | For Agency Use Only |
| PLACE VOUCHER PREPARED | | VOUCHER NUMBER |
| NAME OF PUBLICATION | | SCHEDULE NUMBER |
| NAME OF PUBLISHER OR REPRESENTATIVE | | PAID BY |
| ADDRESS (Street, room number, city, State, and ZIP code) | | |

CHARGES

| TYPEFACE | (size of type) | POINT PER | (inch, square, word, or folio) |
|--------------------|---|----------------------|--------------------------------|
| Line Rates | NUMBER OR LINES (Indicate counted or space) | COST PER LINE | TOTAL COST |
| | FIRST INSERTION | \$ | \$ |
| | ADDITIONAL INSERTIONS GIVE NUMBER ► | | |
| | TOTAL | | \$ |
| Other Rates | NUMBER OF UNITS (Indicate inch, square, word, folio) | COST PER UNIT | TOTAL COST |
| | FIRST INSERTION | \$ | \$ |
| | ADDITIONAL INSERTIONS GIVE NUMBER ► | | |
| | TOTAL | | \$ |

Attach one copy of advertisement (including upper and lower rules) to each copy of voucher here. If copy is not available sign the following affidavit.

| | | |
|--|---|----|
| | TOTAL LINE RATES AND OTHER RATES | |
| | LESS DISCOUNT AT % | |
| | BALANCE DUE | \$ |
| | VERIFIED (Initials) | |

AFFIDAVIT

This represents a true billing for the attached advertising order, with specifications and copy, which has been completed.

SIGNATURE OF PUBLISHER OR REPRESENTATIVE

TITLE

DATE

FOR AGENCY USE ONLY

| | |
|---|-----------------------------|
| ADVERTISEMENT PUBLISHED IN | DATE PUBLISHED |
| I certify that the advertisement described above appeared in the named publication and that this account is correct and eligible for payment. | |
| SIGNATURE AND TITLE OF CERTIFYING OFFICER | DATE |
| SIGNATURE AND TITLE OF AUTHORIZING OFFICER | DATE |
| ACCOUNTING CLASSIFICATION | PAID BY CHECK NUMBER |

¹ If the ability to certify and authority to approve are combined in one person enter "N/A" (not applicable) here.

JOINT NOTICE OF PROPOSED ACTION

by the

U.S. Environmental Protection Agency
Region 9
215 Fremont Street
San Francisco, CA 94105

Environmental Quality Commission
American Samoa Government
Pago Pago, American Samoa 96799

Contact Person: Danny Collier (W-1-1)
Telephone: (415) 974-7432

Contact Person: Pati Faiai

On Applications for National Pollutant
Discharge Elimination System Permits to
Discharge Pollutants to Waters of the
United States

On Applications for Certification for
Compliance with Applicable Effluent
Limitations and Appropriate Requirements
of Territory Law

Public Notice No. GU-86-4-W

23 AUG 1986

The Environmental Protection Agency (EPA), Region 9, San Francisco, California and the American Samoa Environmental Quality Commission, Pago Pago, American Samoa are jointly issuing the following notice of proposed action under the Clean Water Act.

The Environmental Protection Agency, San Francisco, California, has received complete applications for National Pollution Discharge Elimination System (NPDES) permits and has prepared tentative determinations regarding the permits.

On the basis of preliminary review of the requirements of the Clean Water Act as amended, and implementing regulations, the Regional Administrator, Environmental Protection Agency, Region 9, proposes to issue NPDES permits to discharge to the following applicants, subject to certain effluent limitations and special conditions:

Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799
NPDES Permit No. AS0000019

and

Samoa Packing Company, Inc.
P.O. Box 957
Pago Pago, American Samoa 96799
NPDES Permit No. AS0000027

Star-Kist Samoa and Samoa Packing Company operate tuna canneries on Tutuila Island, American Samoa. The canneries receive whole tuna which is processed into canned tuna and dried fish meal. Waste streams from these canneries consist mainly of fish waste, fresh water, and sea water which are treated by the Dissolved Air Flotation (DAF) process. The process waste streams from both canneries are discharged into Pago Pago Harbor.

Under proposed permit conditions, both canneries are required to meet proposed interim and final effluent limits for temperature, suspended solids, oil and grease, pH, nitrogen and phosphorus.

0154

Please
Concur

W-5-1
Pati Chan
8/13/86

W-5-1
M. K. K. K. K.
8/14/86

W-5-1
Sethed
8/14/86

W-5
Sethed
for WBP
8/14/86

OTW W-61
Collier
for Lovelace
8/15/86

W-1
Fmc
8/15/86

W-1-A
Bib
8/15/86

The proposed permits require that both canneries shall meet stringent final effluent limits that are based on American Samoa Water Quality Standards for Pago Pago Harbor.

The ADMINISTRATIVE RECORDS for the DRAFT PERMITS, which includes the APPLIATIONS, DRAFT PERMITS, FACT SHEETS, and all data sent by the applicants for the PERMITS, are available for public inspection. The ADMINISTRATIVE RECORDS may be viewed Monday through Friday from 9:00 A.M. until 4:00 P.M. at the EPA address below. A copy of these documents may be obtained by calling Patrick Chan, Permit Records Controller at (415) 974-9526 or by writing to:

U.S. Environmental Protection Agency, Region 9
Attn: Patrick Chan, PRC (W-5-1)
215 Fremont Street
San Francisco, CA 94105

All comments upon or objections to the DRAFT PERMITS and requests for a PUBLIC HEARING, pursuant to 40 CFR 124.12, must be sent or delivered in writing to Patrick Chan at the address shown above within 30 days of the date of this notice. An extension of the 30 day comment period may be granted if the request for an extension adequately explains why more time is required to prepare comments.

A Copy of the applications, draft permits and fact sheets is also available for public review Monday through Friday from 8:00 A.M. to 4:00 P.M. at the following office:

Environmental Quality Commission
American Samoa Government
Pago Pago, American Samon 96799

Contact Person: Pati Faiai

The Environmental Quality Commission is reviewing the DRAFT PERMITS and may:

1. certify the DRAFT PERMITS without comment; or
2. certify the DRAFT PERMITS and impose conditions more stringent than those contained therein; or
3. deny the certification of the DRAFT PERMITS.

Requests for a PUBLIC HEARING must state the nature of the issues proposed to be raised in the hearing. Pursuant to 40 CFR 124.12, the Regional Administrator shall hold a PUBLIC HEARING if she finds, on the basis of requests, a significant degree of public interest in the DRAFT PERMITS. If the Regional Administrator decides to hold a public hearing, a public notice of the date, time and place of the hearing will be made at least 30 days prior to the hearing. Any person may provide written or oral statements and data pertaining to the DRAFT PERMITS at the public hearing.

If the DRAFT PERMITS become final, and there are no appeals, discharge from and operation of the identified facilities may proceed or continue, subject to the conditions of the permits and other applicable permits and legal requirements.

A final decision to set the conditions and to issue the FINAL PERMITS, or to deny the APPLICATIONS for the permits, shall be made after all comments have been considered. Notice of the final decision for the permits shall be sent to each person who has sent or delivered written comments or requested notice of the final permit decision. The decision for the permits will become effective 30 days from the date of issuance unless:

1. a later effective date is specified in the decision; or
2. an evidentiary hearing is requested pursuant to 40 CFR 124.74. Any person may send or deliver, in writing, a request for an evidentiary hearing. Requests for an evidentiary hearing must state each legal or factual question alleged to be at issue, and its relevance to the permit decision. If the request is sent or delivered by a person other than the applicant, the person will simultaneously send a copy of the request to the applicant. A request for an evidentiary hearing must be sent or delivered to Patrick Chan at the address shown above within 33 days following the mailing of the final decision. If an evidentiary hearing is granted, applicable provisions of the permits will be stayed pending the outcome of the hearing; or
3. there are no comments requesting a change to the DRAFT PERMITS, in which case the final decision for the permits shall become effective immediately upon issuance.

Please bring the foregoing to the attention of all persons you know would be interested in this matter.

JOINT NOTICE OF PROPOSED ACTION

BY THE

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 9
215 Fremont Street
San Francisco, CA 94105

ENVIRONMENTAL QUALITY COMMISSION
American Samoa Government
Pago Pago, American Samoa 96799

Contact Person: Danny Collier (W-1-1)
Telephone: (415) 974-7432

Contact Person: Pati Faiai

On Applications for a National Pollutant
Discharge Elimination System Permits to
Discharge Pollutants to Waters of the
United States

On Applications for Certification for
Compliance with Applicable Effluent
Limitations and Appropriate Requirements
of Territory Law

Public Notice No. AS-86-1-W

The Environmental Protection Agency (EPA), Region 9, San Francisco, California and the American Samoa Environmental Quality Commission, Pago Pago, American Samoa are jointly issuing the following notice of proposed action under the Clean Water Act.

The Environmental Protection Agency, San Francisco, California has received complete applications for National Pollution Discharge Elimination System (NPDES) permits and has prepared tentative determinations regarding the permits.

On the basis of preliminary review of the requirements of the Clean Water Act as amended, and implementing regulations, the Regional Administrator, Environmental Protection Agency, Region 9, proposes to issue NPDES permits to discharge to the following applicants, subject to certain effluent limitations and special conditions:

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Under proposed permit conditions, both canneries are required to meet proposed interim and final effluent limits for temperature, suspended solids, oil and grease, pH, nitrogen and phosphorus.

The proposed permits require that both canneries shall meet stringent final effluent limits that are based on American Samoa Water Quality Standards for Pago Pago Harbor.

The ADMINISTRATIVE RECORDS for the DRAFT PERMITS, which includes the APPLICATIONS, DRAFT PERMITS, FACT SHEETS, and all data sent by the applicants for the PERMITS, are available for public inspection. The ADMINISTRATIVE RECORDS may be viewed Monday through Friday from 9:00 am until 4:00 pm at the EPA address below. A copy of these documents may be obtained by calling Patrick Chan, Permit Records Controller at (415) 974-9526 or by writing to:

U.S. Environmental Protection Agency, Region 9
Attn: Patrick Chan, PRC (W-5-1)
215 Fremont Street
San Francisco, CA 94105

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Environmental Quality Commission
American Samoa Government
Pago Pago, American Samoa 96799

Contact Person: Pati Faiai

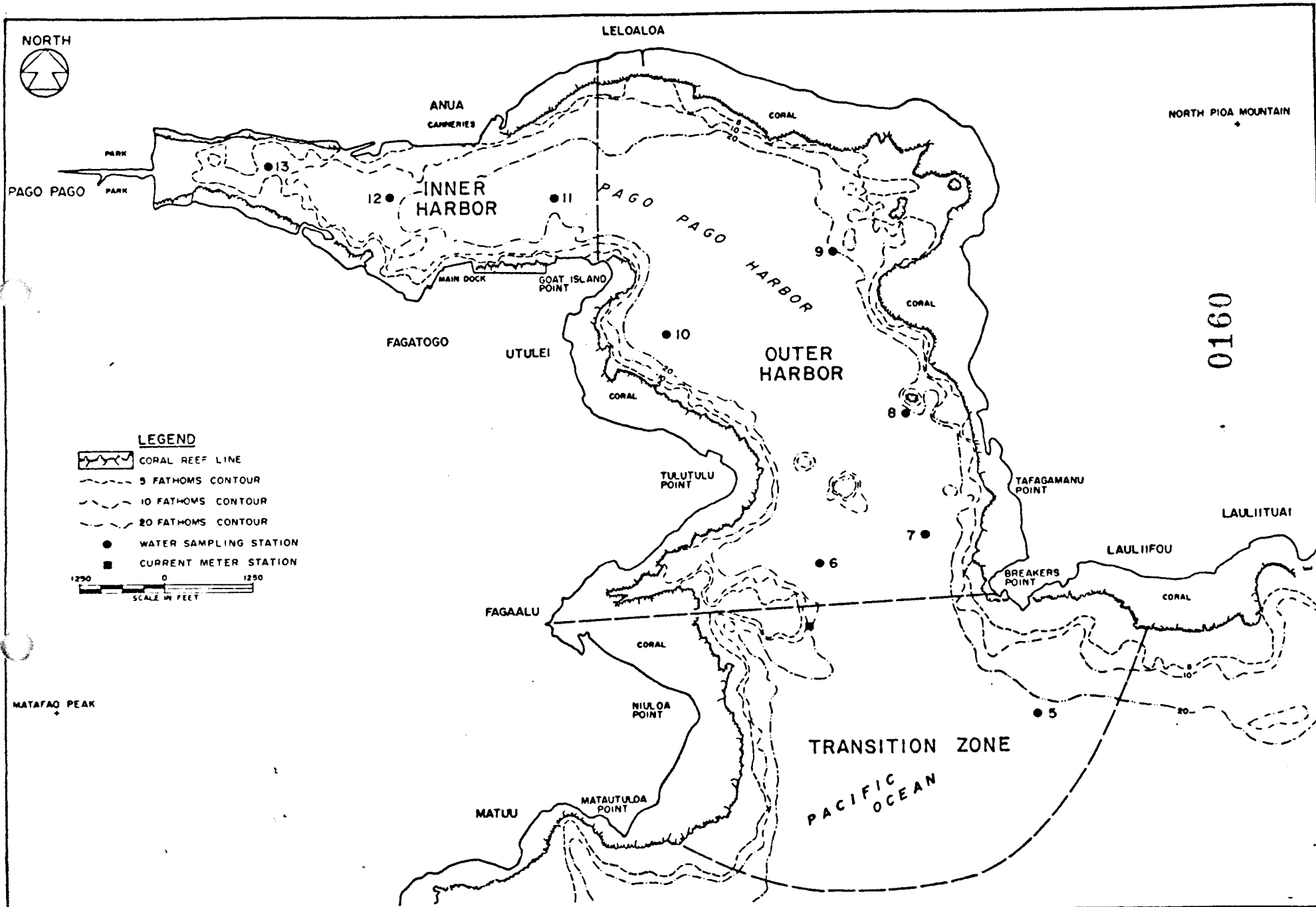
DATA SUMMARY - PAGO PAGO HARBOR

Data taken from STORET and quarterly progress reports. All figures shown are median concentrations in $\mu\text{g/l}$. The median has been calculated by:

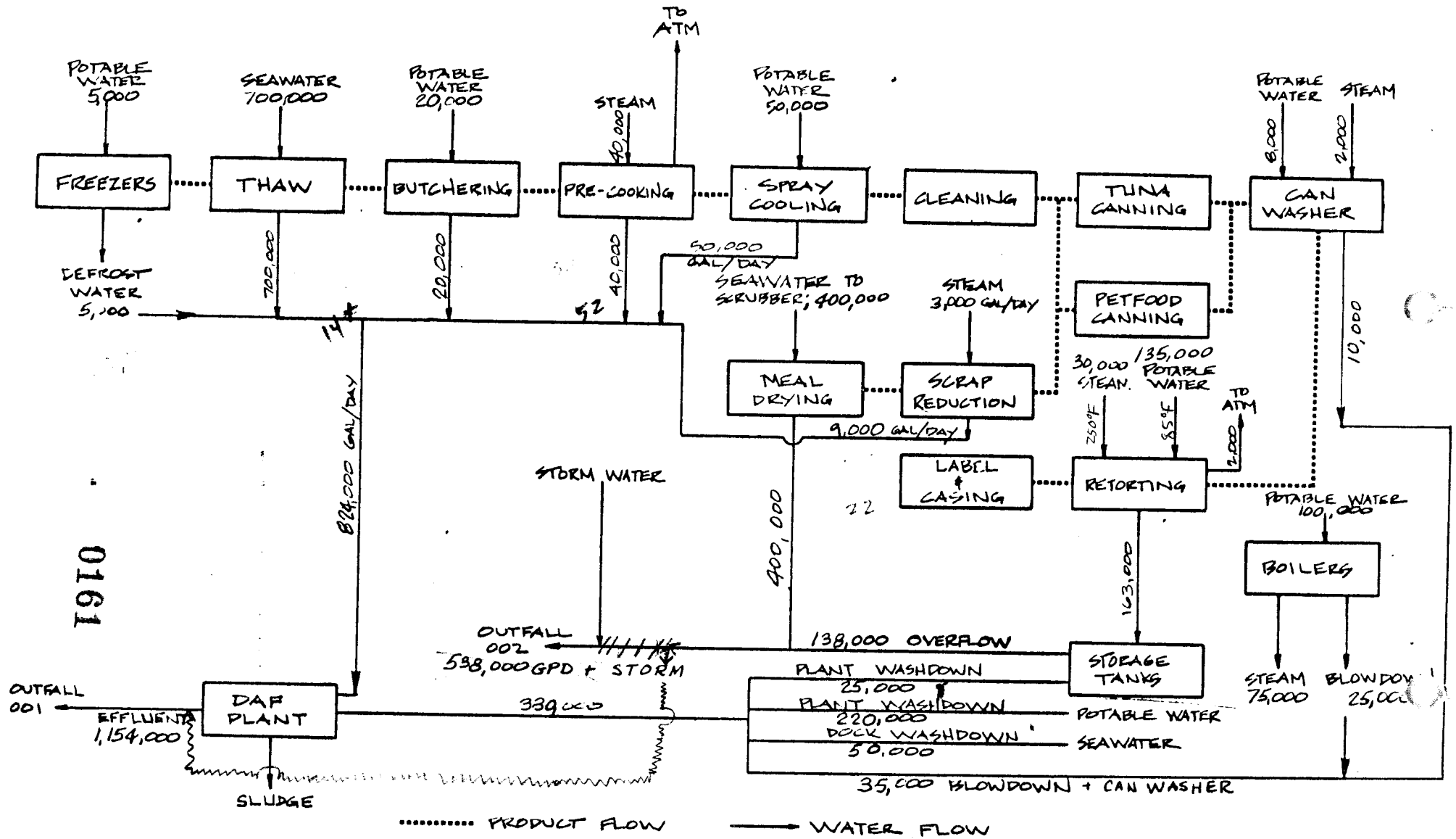
$$\text{Median} = \text{Log}^{-1} \left[\left(\sum_{i=1}^N \text{Log } X_i \right) / N \right]$$

| <u>Station Number and/or Groupings</u> | | <u>5/85-5/86</u> | <u>5/84-5/86</u> |
|--|---|------------------|------------------|
| 5 | N | 99 | 148 |
| | P | 17 | 18 |
| 6 | N | 151 | 175 |
| | P | 12 | 15 |
| 7 | N | 182 | 201 |
| | P | 18 | 19 |
| 8 | N | 219 | 229 |
| | P | 21 | 20 |
| 9 | N | 227 | 237 |
| | P | 25 | 24 |
| 10 | N | 168 | 201 |
| | P | 22 | 22 |
| 11 | N | 340 | No 84 Data |
| | P | 36 | |
| 12 | N | 401 | 422 |
| | P | 42 | 42 |
| 13 | N | 535 | 561 |
| | P | 75 | 74 |

| <u>Station Number and/or Grouping</u> | | <u>5/85-5/86</u> | <u>5/84-5/86</u> |
|---|---|------------------|------------------|
| 11,12,13 (Inner) | N | 418 | 488 |
| | P | 49 | 18 |
| ----- | | | |
| 6,7,8,9,10 (Outer) | N | 188 | 208 |
| | P | 19 | 20 |
| ----- | | | |
| 5 (Transition) | N | 99 | 148 |
| | P | 17 | 18 |
| ----- | | | |
| 5-13 (Whole) | N | 240 | 239 |
| | P | 26 | 27 |
| ----- | | | |



STAR-KIST SAMOA, INC.
WASTE WATER FLOWS





Star-Kist Foods, Inc.

180 E. Ocean Blvd.
Long Beach, CA 90802

June 25, 1986

582 TUNA STREET
TERMINAL ISLAND, CALIFORNIA 90731
(213) 548-4411

Ms. Madonna Narvaez
USEPA Region IX
Water Management Division
215 Fremont Street
San Francisco, CA 94105

Subject: Starkist Samoa NPDS Permit Renewal

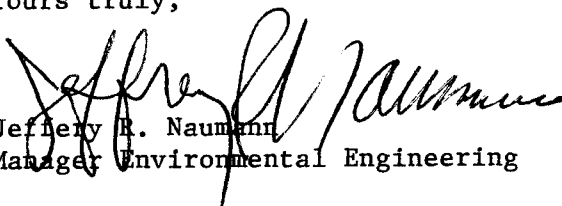
Dear Ms. Narvaez:

Enclosed is a copy of a portion of the final rule-making that would set BCT equal to BPCT for the tuna industry. This was received from one of our trade groups with the understanding that they expected it to be published within the next couple of weeks. As the final rule is the same as the proposed rule from several years ago, and since we have heard nothing contrary to the fact that BPCT would be adopted for BCT, we are assuming that it will take place as expected.

As I mentioned on the telephone, due to the power outage we were unable to take the nonprocess samples as expected. We also have had two key people at the cannery off island for the past couple of weeks, but hope to take them this week in order to verify loadings from these streams. Our experience with similar flows at other canneries is that these flows are very dilute and are appropriate for direct discharge to the harbor.

Please call me if I can be of any further assistance.

Yours truly,


Jeffery R. Naumann
Manager Environmental Engineering

JRN:lw

Enclosure

cc: Danny Collier/Norm Lovelace-EPA IX
D. Ballands
A. Cropley
R. Hetzler
K. Hauge

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II. Summary of Final Rulemaking

A. Application of BCT Methodology

1. Candidate Technologies

Establishing BCT effluent limitations for an industrial category or subcategory begins by identifying technology options that provide additional conventional pollutant control beyond the level of control provided by the application of BPT effluent limitations. Any such "candidate technologies" are then evaluated to determine if they are technologically feasible and economically achievable. The candidate technology must meet these requirements to be considered as a basis for BCT effluent limitations. EPA then evaluates candidate technologies by applying the BCT cost test, which consists of two parts: the POTW test and the industry cost-effectiveness test.

2. POTW Test

To "pass" the POTW test, the cost per pound of conventional pollutant removed by industrial dischargers in upgrading from BPT to the candidate BCT must be less than the cost per pound of conventional pollutant removed in upgrading POTWs from secondary treatment to advanced secondary treatment. The upgrade cost to industry must be less than the POTW benchmark of \$0.25 per pound (in 1976 dollars) for industries whose cost per pound is based on long-term performance data (first tier POTW benchmark), or less than \$0.14 per pound for industries whose cost per pound is not based on long-term performance data (second tier POTW benchmark).

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While the preferred approach for applying the BCT methodology is to calculate the cost per pound with long-term performance data, these data are not uniformly available for most of the secondary industries. The costs per pound for industries without long-term performance data are derived from the maximum 30-day limitations that were originally based on the application of BAT, prior to the requirement that the Agency establish BCT effluent limitations guidelines. Therefore, for purposes of applying the BCT methodology to the industries with this data constraint, a second tier of benchmarks was calculated using the same type of data as is available for the industries without long-term performance data (i.e., 30-day data).

As discussed in Section I, the conventional pollutants are BOD, TSS, oil and grease, fecal coliform, and pH. The pollutants included in calculating the POTW pollutant removal are BOD and TSS. These pollutants are also used to calculate the pollutant removal for a candidate BCT, but oil and grease may be included when appropriate in the context of the industry and technology being evaluated. Fecal coliform and pH are not included in the calculations because control of these pollutants is not measureable as "pounds removed." An acceptable interval for controlling pH is evaluated with respect to the particular processes of a candidate technology. Generally, the acceptable pH interval for BCT will be the same as that for BPT. Maintaining the acceptable interval is an inherent cost of the BCT technology and must be economically achievable and cost-reasonable.

3. Industry Cost-Effectiveness Test

Candidate technologies must also "pass" the industry cost-effectiveness test. For each industry subcategory, EPA computes a ratio of two incremental costs. The first is the cost per pound removed by the BCT candidate technology relative to BPT; the second is the cost per pound removed by BPT relative to no treatment (i.e., the second cost compares raw wasteload to pollutant load after application of BPT).

The ratio of the first cost divided by the second is a measure of the candidate technology's cost-effectiveness. The ratio is compared to an industry cost benchmark, which again is based on POTW cost and pollutant removal data. The benchmark, like the measure for a candidate technology, is a ratio of two incremental costs: the cost per pound to upgrade a POTW from secondary treatment to advanced secondary treatment is divided by the cost per pound to initially achieve secondary treatment from raw wasteload. If the industry ratio is lower than the benchmark, the candidate technology passes the industry cost test. The benchmark for industries whose ratio is based on long-term performance data is 1.29. The second tier benchmark for industries whose ratio is not based on long-term performance data is 0.68.

In calculating this ratio, EPA will consider any BCT cost per pound less than \$0.01 to be the equivalent of de minimis or zero costs. There are cases in today's rulemaking where the numerator of the industry cost ratio and therefore the entire ratio are taken to be zero. EPA believes any de minimis cost per pound for a candidate BCT technology meets Congressional intent concerning the concept of reasonableness for purposes of the second test.

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4. BCT Determination

EPA will evaluate both the POTW test and the industry cost-effectiveness test as measures of reasonableness. The most stringent technology option that "passes" these tests provides the basis for setting BCT effluent limitations. Generally, if all candidate technologies fail any of the tests, or if no candidate technologies more stringent than BPT are identified, then BCT effluent limitations are established at a level equal to BPT effluent limitations.

There may be instances where, because of a lack of comparable industry data, a strict comparison to the benchmarks developed in this rulemaking would undermine Congressional intent on cost-reasonableness. In such instances, EPA will develop appropriate procedures to evaluate cost-reasonableness on an industry-specific basis. Additionally, Section 304(b)(4)(B) instructs the Agency to consider "other factors deemed appropriate" when making determinations about BCT. Again, EPA will support such evaluations on an industry-specific basis.

B. Industrial Categories Affected and Summary of Their Results

This final regulation identifies the methodology EPA uses to establish BCT effluent limitations, pursuant to the provisions of Section 304(b)(4)(B) of the Clean Water Act. This methodology is used in today's rulemaking to establish BCT effluent limitations for many of the secondary industries. For some of the primary industries, BCT effluent limitations have already been proposed; for others, they have been deferred. While BCT effluent limitations for primary industries will be promulgated in separate rulemaking notices, the

methodology used to determine the reasonableness of those limitations will be the same as described in today's final rule.

Due to the extensive regulatory activity (proposal, promulgation, withdrawal, and reproposal) and the time span affecting BCT effluent limitations for the secondary industries, all subcategories for the secondary industries are reviewed here. Table 1 summarizes the results of this review. The third column of Table 1 describes the status of BCT effluent limitations prior to today's rulemaking. The fourth column indicates whether the existing status is affected by this rulemaking and shows the final outcome. The final column presents the rationale for the final determination.

The results indicate that establishing BCT effluent limitations at a level of control more stringent than BPT effluent limitations is reasonable for seven subcategories. Four subcategories are in the Canned and Preserved Seafood Processing category: Pacific Coast Hand-Shucked Oyster, Atlantic and Gulf Coast Hand-Shucked Oyster, Nonalaskan Scallop, and Abalone Processing; two are in the Meat Products category: Small Processors and Renderers; and one is in the Phosphate Manufacturing category: Sodium Phosphates. The Agency estimates that the additional treatment associated with the more stringent limitations for these subcategories will result in minimal incremental costs. For the remaining subcategories where BCT effluent limitations are established equal to the BPT effluent limitations, there is no incremental cost beyond BPT.

TABLE 1

SUMMARY OF BCT METHODOLOGY RESULTS AND BCT EFFLUENT LIMITATIONS GUIDELINES
FOR SECONDARY INDUSTRIES

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination ^{1/} |
|---|----------|--|--|---------------------------------------|
| <u>DAIRY PRODUCTS PROCESSING</u> | | | | |
| A - Receiving Stations | 405.17 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| B - Fluid Products | 405.27 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| C - Cultured Products | 405.37 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| D - Butter | 405.47 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| E - Cottage Cheese and Cultured Cream Cheese | 405.57 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| F - Natural and Processed Cheese | 405.67 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| G - Fluid Mix for Ice Cream and Other Frozen Desserts | 405.77 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| H - Ice Cream, Frozen Desserts, Novelties and Other Dairy Desserts | 405.87 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| I - Condensed Milk | 405.97 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| J - Dry Milk | 405.107 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|--------------------------------|----------|--|---|------------------------------------|
| K - Condensed Whey | 405.117 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for BOD, TSS. | Fail BCT methodology, Reason #3 |
| L - Dry Whey | 405.127 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| <u>GRAIN MILLS</u> | | | | |
| A - Corn Wet Milling | 406.17 | Limitations suspended | No change to prior status. | Technology under review. |
| B - Corn Dry Milling | 406.27 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| C - Normal Wheat Flour Milling | 406.37 | BCT=BPT, zero discharge | No change to prior status. | No candidate technology |
| D - Bulgur Wheat Flour Milling | 406.47 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for BOD, TSS. | Fail BCT methodology, Reason #3 |
| E - Normal Rice Milling | 406.57 | BCT=BPT, zero discharge | No change to prior status. | No candidate technology |
| F - Parboiled Rice Processing | 406.67 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| G - Animal Feed | 406.77 | BCT=BPT, zero discharge | No change to prior status. | No candidate technology |
| H - Hot Cereal | 406.87 | BCT=BPT, zero discharge | No change to prior status. | No candidate technology |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|--|----------|--|---|------------------------------------|
| I - Ready-to-Eat-Cereal | 406.97 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| J - Wheat Starch and Gluten | 406.107 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| <u>CANNED AND PRESERVED FRUITS AND VEGETABLES PROCESSING</u> | | | | |
| A - Apple Juice | 407.17 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for BOD, TSS. | Fail BCT methodology, Reason #3 |
| B - Apple Products | 407.27 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for BOD, TSS. | Fail BCT methodology, Reason #3 |
| C - Citrus Products | 407.37 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| D - Frozen Potato Products | 407.47 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for BOD, TSS. | Fail BCT methodology, Reason #3 |
| E - Dehydrated Potato Products | 407.57 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| F - Canned and Preserved Fruits | 407.67 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| G - Canned and Preserved Vegetables | 407.77 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| H - Canned and Miscellaneous Specialties | 407.87 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|---|----------|--|--|---------------------------------|
| <u>CANNED AND PRESERVED SEAFOOD PROCESSING</u> | | | | |
| A - Farm-Raised Catfish Processing | 408.17 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #3 |
| B - Conventional Blue Crab Processing | 408.27 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| C - Mechanized Blue Crab Processing | 408.37 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| D - Non-Remote Alaskan Crab Meat Processing | 408.47 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| E - Remote Alaskan Crab Meat Processing | 408.57 | No limitations | Establish BCT=BPT | Fail BCT methodology, Reason #1 |
| F - Non-Remote Alaskan Whole Crab and Crab Section Processing | 408.67 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| G - Remote Alaskan Whole Crab and Crab Section Processing | 408.77 | No limitations | Establish BCT=BPT | Fail BCT methodology, Reason #1 |
| H - Dungeness and Tanner Crab Processing in the Contiguous States | 408.87 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| I - Non-Remote Alaskan Shrimp Processing | 408.97 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|---|----------|--|---|------------------------------------|
| J - Remote Alaskan Shrimp Processing | 408.107 | No limitations | Establish BCT=BPT | Fail BCT methodology, Reason #1 |
| K - Northern Shrimp Processing in the Contiguous States | 408.117 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| L - Southern Non-Breaded Shrimp Processing in the Contiguous States | 408.127 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| M - Breaded Shrimp Processing in the Contiguous States | 408.137 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| N - Tuna Processing | 408.147 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| O - Fish Meal Processing | 408.157 | No limitations | Establish BCT=BPT for BOD, TSS, oil and grease, pH. | Fail BCT methodology, Reason #2 |
| P - Alaskan Hand-Butchered Salmon Processing | 408.167 | | | |
| -- Non-Remote | | No limitations | Reserve Section. | Technology under review |
| -- Remote | | No limitations | Establish BCT=BPT. | Fail BCT methodology, Reason #1 |

Table 1 (con'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|--|----------|--|--|------------------------------------|
| Q - Alaskan Mechanized Salmon Processing | 408.177 | | | |
| -- Non-Remote | | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| -- Remote | | No limitations | Establish BAT=BPT. | Fail BCT methodology, Reason #1 |
| R - West Coast Hand-Butchered Salmon Processing | 408.187 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| S - West Coast Mechanized Salmon Processing | 408.197 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| T - Alaskan Bottom Fish Processing | 408.207 | | | |
| -- Non-Remote | | No limitations | Reserve Section. | Technology under review |
| -- Remote | | No limitations | Establish BCT=BPT. | Fail BCT methodology, Reason #1 |
| U - Non-Alaskan Conventional Bottom Fish Processing | 408.217 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| V - Non-Alaskan Mechanized Bottom Fish Processing | 408.227 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |

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Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|---|----------|--|---|------------------------------------|
| W - Hand-Shucked Clam Processing | 408.237 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #2 |
| X - Mechanized Clam Processing | 408.247 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| Y - Pacific Coast Hand-Shucked Oyster Processing | 408.257 | No limitations | Establish BCT=BPT for pH and BCT more stringent than BPT for TSS, oil and grease. | Pass BCT methodology |
| • Z - Atlantic and Gulf Coast Hand-Shucked Oyster Processing | 408.267 | No limitations | Establish BCT=BPT for pH and BCT more stringent than BPT for TSS, oil and grease. | Pass BCT methodology |
| AA - Steamed and Canned Oyster Processing | 408.277 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| AB - Sardine Processing | 408.287 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| AC - Alaskan Scallop Processing | 408.297 | | | |
| -- Non-Remote | | No limitations | Reserve Section. | Technology under review |
| -- Remote | | No limitations | Establish BCT=BPT. | Fail BCT methodology, Reason #1 |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|---|----------|--|---|------------------------------------|
| AD - Non-Alaskan Scallop Processing | 408.307 | No limitations | Establish BCT=BPT for pH and BCT more stringent than BPT for TSS, oil and grease. | Pass BCT methodology |
| AE - Alaskan Herring Fillet Processing | 408.317 | | | |
| -- Non-Remote | | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| -- Remote | | No limitations | Establish BCT=BPT. | Fail BCT methodology, Reason #1 |
| AF - Non-Alaskan Herring Fillet Processing | 408.327 | No limitations | Establish BCT=BPT for TSS, oil and grease, pH. | Fail BCT methodology, Reason #1 |
| AG - Abalone Processing | 408.337 | No limitations | Establish BCT=BPT for pH and BCT more stringent than BPT for TSS, oil and grease. | Pass BCT methodology |
| <u>SUGAR PROCESSING</u> | | | | |
| A - Beet Sugar Processing | 409.17 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for BOD, TSS, fecal coliform. | Fail BCT methodology, Reason #3 |
| B - Crystalline Cane Sugar Refining | 409.27 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for BOD, TSS. | Fail BCT methodology, Reason #3 |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|--|----------|--|---|------------------------------------|
| C - Liquid Cane Sugar Refining | 409.37 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for BOD, TSS. | Fail BCT methodology, Reason #3 |
| D - Louisiana Raw Cane Sugar Processing | 409.47 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| E - Florida and Texas Raw Cane Sugar Processing | 409.57 | No limitations | Establish BCT=BPT. | No candidate technology |
| F - Hilo-Hamakua Coast of the Island of Hawaii Raw Cane Sugar Processing | 409.67 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| G - Hawaiian Raw Cane Sugar Processing Subcategory | 409.77 | No limitations | Establish BCT=BPT. | No candidate technology |
| - Puerto Rican Raw Cane Sugar Processing | 409.87 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| <u>CEMENT MANUFACTURING</u> | | | | |
| A - Nonleaching | 411.17 | BCT=BPT for pH, TSS | No change to prior status. | No candidate technology |
| B - Leaching | 411.27 | BAT=BPT for pH | No change for pH. Establish BCT=BPT for TSS. | Fail BCT methodology, Reason #3 |
| C - Materials Storage Piles Runoff | 411.37 | BCT=BPT for pH, TSS | No change to prior status. | No candidate technology |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|--|------------|--|-------------------------------------|--|
| <u>FEEDLOTS</u> | | | | |
| A - All Subcategories except Ducks | 412.17 | BCT=BAT | Reserve section. | Technology under review |
| B - Ducks | No Section | No limitations | No change to prior status. | Technology under review |
| <u>FERTILIZER MANUFACTURING</u> | | | | |
| A - Phosphate | 418.17 | BCT=BPT for TSS | No change to prior status. | No candidate technology <u>2/</u> |
| B - Ammonia | 418.27 | BCT=BPT for pH | No change to prior status. | No candidate technology |
| C - Urea | No Section | No limitations | No change to prior status. | No control of conventional pollutant discharges |
| D - Ammonium Nitrate | No Section | No limitations | No change to prior status. | No control of conventional pollutant discharges |
| E - Nitric Acid | No Section | No limitations | No change to prior status. | No control of conventional pollutant discharges |
| F - Ammonium Sulfate Production | 418.67 | BCT=BPT | No change to prior status. | No candidate technology |
| G - Mixed and Blend Fertilizer Production | 418.77 | BCT=BPT | No change to prior status. | No candidate technology |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|--|------------|--|--|--|
| <u>PHOSPHATE MANUFACTURING</u> | | | | |
| A - Phosphorus Production | No Section | No limitations | No change to prior status. | No control of conventional pollutant discharges |
| B - Phosphorus Consuming | No Section | No limitations | No change to prior status. | No control of conventional pollutant discharges |
| C - Phosphate | No Section | No limitations | No change to prior status. | No control of conventional pollutant discharges |
| D - Defluorinated Phosphate Rock | 422.47 | BCT=BPT for TSS, pH | No change to prior status. | No candidate technology |
| E - Defluorinated Phosphoric Acid | 422.57 | BCT=BPT for TSS, pH | No change to prior status. | No candidate technology |
| F - Sodium Phosphates | 422.67 | No limitations | Establish BCT=BPT for pH and BCT more stringent than BPT for TSS. | Pass BCT methodology |
| <u>FERROALLOY MANUFACTURING</u> | | | | |
| A - Open Electric Furnaces With Wet Air Pollution Control Devices | 424.17 | No limitations | Establish BCT=BPT for TSS, pH. | Fail BCT methodology, Reason #3 |
| B - Covered Electric Furnaces and Other Smelting Operations With Wet Air Pollution Control Devices | 424.27 | No limitations | Establish BCT=BPT for TSS, pH. | Fail BCT methodology, Reason #3 |
| C - Slag Processing | 424.37 | No limitations | Establish BCT=BPT for TSS, pH. | Fail BCT methodology, Reason #3 |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|---|----------|--|---|------------------------------------|
| D - Covered Calcium Carbide Furnaces With Wet Air Pollution Control Devices | 424.47 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS. | Fail BCT methodology, Reason #3 |
| E - Other Calcium Carbide Furnaces | 424.57 | BCT=BPT | No change to prior status. | No candidate technology |
| F - Electrolytic Manganese Products | 424.67 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS. | Fail BCT methodology, Reason #3 |
| G - Electrolytic Chromium | 424.77 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS. | Fail BCT methodology, Reason #3 |
| <u>GLASS MANUFACTURING</u> | | | | |
| A - Insulation Fiberglass | 426.17 | No limitations | Establish BCT=BPT for BOD, TSS, pH. | Fail BCT methodology, Reason #3 |
| B - Sheet Glass Manufacturing | 426.27 | BCT=BPT | No change to prior status. | No candidate technology |
| C - Rolled Glass Manufacturing | 426.37 | BCT=BPT | No change to prior status. | No candidate technology |
| D - Plate Glass Manufacturing | 426.47 | No limitations | Establish BCT=BPT for TSS, pH. | Fail BCT methodology, Reason #3 |
| E - Float Glass Manufacturing | 426.57 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS, oil. | Fail BCT methodology, Reason #3 |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|---|------------|--|---|--|
| F - Automotive Glass Tempering | 426.67 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS, oil. | Fail BCT methodology, Reason #3 |
| G - Automotive Glass Laminating | 426.77 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS, oil. | Fail BCT methodology, Reason #3 |
| H - Glass Container Manufacturing | 426.87 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS, oil. | Fail BCT methodology, Reason #3 |
| I - Machine Pressed and Blown Glass Manufacturing | No Section | No limitations | No change to prior status. | No control of conventional pollutant discharges |
| J - Glass Tubing (Danner) Manufacturing | 426.107 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS. | Fail BCT methodology, Reason #3 |
| K - Television Picture Tube Envelope Manufacturing | 426.117 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS, oil. | Fail BCT methodology, Reason #3 |
| L - Incandescent Lamp Envelope Manufacturing | 426.127 | BCT=BPT for pH | No change for pH. Establish BCT=BPT for TSS, oil. | Fail BCT methodology, Reason #3 |
| M - Hand Pressed and Blown Glass Manufacturing | 426.137 | BCT set for pH | Reserve section. | Technology under review |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|--|------------|--|-------------------------------------|--------------------------|
| <u>ASBESTOS MANUFACTURING</u> | | | | |
| A - Asbestos-Cement Pipe | No Section | No limitations | No change to prior status. | Technology under review |
| B - Asbestos-Cement Sheet | No Section | No limitations | No change to prior status. | Technology under review |
| C - Asbestos Paper (Starch Binder) | No Section | No limitations | No change to prior status. | Technology under review |
| D - Asbestos Paper (Elastomeric Binder) | No Section | No limitations | No change to prior status. | Technology under review |
| E - Asbestos Millboard | No Section | No limitations | No change to prior status. | Technology under review |
| F - Asbestos Roofing | No Section | No limitations | No change to prior status. | Technology under review |
| G - Asbestos Floor Tile | No Section | No limitations | No change to prior status. | Technology under review |
| H - Coating or Finishing of Asbestos Textiles | No Section | No limitations | No change to prior status. | Technology under review |
| I - Solvent Recovery | 427.97 | BCT=BPT for TSS, pH | No change to prior status. | No candidate technology. |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|---------------------------------|------------|--|---|------------------------------------|
| J - Vapor Absorption | No Section | No limitations | No change to prior status. | Technology under review |
| K - Wet Dust Collection | No Section | No limitations | No change to prior status. | Technology under review |
| <u>MEAT PRODUCTS</u> | | | | |
| A - Simple Slaughterhouse | 432.17 | BCT=BPT for fecal coliform, pH in some processes | Establish BCT=BPT for BOD, TSS, oil and grease, fecal coliform, pH as limited in each process. | Fail BCT methodology, Reason #1 |
| B - Complex Slaughterhouse | 432.27 | BCT=BPT for fecal coliform, pH in some processes | Establish BCT=BPT for BOD, TSS, oil and grease, fecal coliform, pH as limited in each process. | Fail BCT methodology, Reason #1 |
| C - Low-Processing Packinghouse | 432.37 | BCT=BPT for fecal coliform, pH in some processes | Establish BCT=BPT for BOD, TSS, oil and grease, fecal coliform, pH as limited in each process. | Fail BCT methodology, Reason #1 |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|--|----------|--|--|---------------------------------|
| D - High-Processing Packinghouse | 432.47 | BCT=BPT for fecal coliform, pH in some processes | Establish BCT=BPT for BOD, TSS, oil and grease, fecal coliform, pH as limited in each process. | Fail BCT methodology, Reason #1 |
| E - Small Processor | 432.57 | No limitations | Establish BCT more stringent than BPT for BOD, TSS, oil and grease, pH, fecal coliforms. | Pass BCT methodology |
| F - Meat Cutter | 432.67 | BCT=BPT for fecal coliform, pH. | No change for fecal coliform, pH. Establish BCT=BPT for BOD, TSS, oil and grease. | Fail BCT methodology, Reason #1 |
| G - Sausage and Luncheon Meats Processor | 432.77 | BCT=BPT for fecal coliform, pH. | No change for fecal coliform, pH. Establish BCT=BPT for BOD, TSS, oil and grease. | Fail BCT methodology, Reason #1 |

Table 1 (cont'd)

| Industry and Subpart | CFR Part | Prior Status of BCT Effluent Limitations | Outcome of Today's Rulemaking | Basis for Determination |
|----------------------------|----------|--|---|------------------------------------|
| H - Ham Processor | 432.87 | BCT=BPT for fecal coliform, pH. | No change for fecal coliform, pH. Establish BCT=BPT for BOD, TSS, oil and grease. | Fail BCT methodology, Reason #1 |
| I - Canned Meats Processor | 432.97 | BCT=BPT for fecal coliform, pH. | No change for fecal coliform, pH. Establish BCT=BPT for BOD, TSS, oil and grease. | Fail BCT methodology, Reason #1 |
| J - Renderers | 432.107 | No limitations | Establish BCT more stringent than BPT for BOD, TSS, oil and grease, pH, fecal coliform. | Pass BCT methodology |

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Table 1 (cont'd)

1/ Further Explanation of Table Entries for "Basis for Determination"

Fail BCT methodology, Reason #1: EPA has not identified a technically feasible candidate technology more stringent than BPT.

Fail BCT methodology, Reason #2: EPA has not identified an economically achievable candidate technology more stringent than BPT.

Fail BCT methodology, Reason #3: The candidate technology is not cost-reasonable; it fails the BCT cost test.

No control of conventional pollutant discharges:

EPA has not yet identified a need to control conventional pollutant discharges in this subcategory. For some subcategories, there are no regulations currently in effect.

No candidate technology:

EPA has not identified a candidate technology providing more stringent control of conventional pollutants than BPT. This applies to subcategories where BPT and BCT require zero discharge.

Technology under review:

The BCT candidate technology is still being reviewed as a basis for setting BCT effluent limitations. The review may pertain to technical feasibility, economic achievability, or cost-reasonableness.

2/ For the Phosphate Fertilizer subcategory, the Agency has proposed an amendment to the applicability section that would exclude four plants in Louisiana from BAT and BCT effluent limitations guidelines. Final action on the amendment is pending. As part of that rulemaking, EPA will consider appropriate BCT effluent limitations guidelines for facilities in Louisiana.

V. BCT Effluent Limitations Guidelines for Secondary Industries

A. Introduction

One major purpose of this rulemaking is to establish BCT effluent limitations for many of the secondary industries. EPA reviewed the status of BCT effluent limitations in each subcategory in the following industries: Dairy Products, Grain Mills, Canned and Preserved Fruits and Vegetables, Canned and Preserved Seafoods, Sugar Processing, Cement Manufacturing, Feedlots, Fertilizer Manufacturing, Phosphate Manufacturing, Ferroalloy Manufacturing, Glass Manufacturing, Asbestos Manufacturing, Meat Products, and Mineral Mining and Processing. A summary of the results is shown in Table 1. The background data and calculations are reported in the record for this rulemaking.

The BCT cost test calculations for these industries were frequently based on cost and effluent data collected at the time of the original proposal and promulgation of BAT effluent limitations for each industry. If more current information regarding technology options and their economic achievability became available after promulgation of a final rule, EPA used that information to determine whether the technology satisfied all of the statutory requirements. Thus, the Agency is generally adopting previous findings concerning availability and effectiveness of treatment technologies.

In addition to the BCT cost test, Section 304(b)(4)(B) of the Clean Water Act requires EPA to consider other factors such as the age of equipment, production process, and energy requirements when establishing BCT effluent limitations. Based on the rulemaking record for these industries and on this proceeding, EPA has determined

that the final BCT effluent limitations following this preamble are technically feasible and otherwise satisfy Section 304(b)(4)(B).

Today's regulation covers 135 subcategories (including subdivisions of subcategories); seven pass the BCT cost test and EPA is promulgating BCT limitations more stringent than BPT in these cases. For 88 of the remaining subcategories, BCT limitations are established equal to BPT limitations either because the candidate BCT technology fails the BCT cost test (48 subcategories) or because the Agency has not identified a technology that will achieve greater removals of conventional pollutants than achieved by BPT and also satisfy the requirements with respect to technical and economic feasibility (40 subcategories). For the remaining 40 subcategories, no action is taken with respect to BCT effluent limitations for one of two reasons. First, after reviewing existing limitations under the final BCT methodology, the Agency found that the existing limitations required no change, or second, the Agency has not completed a review of the candidate BCT technologies. A discussion of BCT regulations for each secondary industry follows.

B. Rationale for Establishing BCT Effluent Limitations and Changes Since Proposal

1. Dairy Products Processing (40 CFR Part 405)

The technology basis for the former BAT limitations was tertiary treatment by multimedia filtration. These BAT limitations addressed conventional pollutants only, and in 1979, were replaced by BCT limitations. Prior to the reproposal of BCT limitations in 1982, the Agency reviewed additional information regarding the filtration technology and determined

that to ensure effective, year-round performance, it may be necessary to employ coagulation-sedimentation prior to filtration. This may be required because the suspended solids in biologically-treated dairy products processing wastewaters are difficult to treat, in that the excess solids can cause filter blinding and substantial operational difficulty. When the costs of coagulation-sedimentation are taken into account, none of the subcategories pass the BCT cost test. Additionally, EPA has not identified any other technology that results in further reduction of conventional pollutant discharges. Therefore, EPA is establishing BCT limitations equal to BPT limitations for all 12 subcategories in this industry. The final action for these subcategories is the same as the action proposed in 1982.

2. Grain Mills (40 CFR Part 406)

There are ten subcategories in this industry. For four subcategories (Normal Wheat Flour Milling, Normal Rice Milling, Animal Feed, and Hot Cereal), the BPT regulation requires zero discharge of process wastewater. BCT limitations for these four subcategories, established in 1979, already require zero discharge and remain substantively unchanged by this rulemaking because BCT limitations cannot be less stringent than BPT, and further levels of control do not exist beyond zero discharge. An editorial revision is made for these subcategories by incorporating the BPT requirement into BCT limitations by reference.

For the Corn Wet Milling Subcategory, BCT limitations were suspended in July 1980 (45 FR 45582) pending an evaluation of BPT costs. The Agency has not completed this evaluation, and the BCT limitations for this subcategory remain suspended.

The candidate BCT technology for the remaining five subcategories (Corn Dry Milling, Bulgur Wheat Flour Milling, Parboiled Rice Processing, Ready-to-Eat Cereal, and Wheat Starch and Gluten) was filtration, which was the basis for the original BAT limitations. The Agency applied the BCT cost test to this technology for these five subcategories, and it failed, indicating that filtration is not cost-reasonable in these cases. No other candidate technology has been identified and, therefore, BCT limitations are promulgated equal to BPT. The final action for these five subcategories is the same as was proposed in 1982.

3. Canned and Preserved Fruits and Vegetables Processing (40 CFR Part 407)

The candidate BCT technology for the eight subcategories in this industry was filtration. This technology fails the BCT cost test, and no other suitable technology for the removal of conventional pollutants has been identified. Therefore, BCT limitations are established equal to BPT. The final action for this industry is the same as was proposed in 1982.

4. Canned and Preserved Seafood Processing (40 CFR Part 408)

There are 33 subcategories in this industry, and five are further subdivided by geographic location for purposes of this review. The candidate BCT technology for 12 subcategories and sections of two additional subcategories was dissolved air flotation, which was the technology basis for the former BAT limitations. This technology has not been widely applied at full scale, except for the Tuna Subcategory. Space requirements for installation of this technology present problems for many of the plants. EPA has determined, therefore, that dissolved

air flotation is not feasible for the following subcategories:

Non-Remote Alaskan Crab Meat Processing, Non-Remote Alaskan Whole Crab and Crab Section Processing, Dungeness and Tanner Crab Processing in the Contiguous States, Non-Remote Alaskan Shrimp Processing, Northern Shrimp Processing in the Contiguous States, Southern Non-Breaded Shrimp Processing in the Contiguous States, Breaded Shrimp Processing in the Contiguous States, Alaskan Mechanized Salmon Processing (Non-Remote), West Coast Hand-Butchered Salmon Processing, West Coast Mechanized Salmon Processing, Non-Alaskan Mechanized Bottom Fish Processing, Sardine Processing, Alaskan Herring Fillet Processing (Non-Remote), and Non-Alaskan Herring Fillet Processing. The Agency has not identified any other BCT candidate technology and is therefore establishing BCT effluent limitations equal to BPT effluent limitations for these subcategories.

The basis of BAT limitations in the Tuna Subcategory was optimized dissolved air flotation with chemically-assisted coagulation. The optimized operation adds operational complexity, maintenance requirements, and disposal costs for additional sludge volume. The Agency concludes that these operational difficulties are such that optimized dissolved air flotation is not technically feasible for the Tuna Subcategory. This technology was the only BCT candidate technology identified for the Tuna Subcategory. For these reasons, BCT effluent limitations are established equal to BPT effluent limitations.

In five other subcategories, the candidate BCT technology was aerated lagoons, which was the technology basis for the former BAT limitations. Based on information evaluated after BAT limitations had been issued, EPA determined that the technology is not feasible

for Conventional Blue Crab Processing, Mechanized Blue Crab Processing, Non-Alaskan Conventional Bottom Fish Processing, Mechanized Clam Processing, and Steamed and Canned Oyster Processing. EPA determined that aerated lagoons are not a feasible technology for these subcategories because lagoons require a substantial amount of land, which is not uniformly available. Further, the seasonal and often sporadic processing operations of these plants do not provide the consistent source of wastewater needed for proper functioning of biological treatment systems such as aerated lagoons. EPA has not identified any other feasible technology providing further control of conventional pollutants than BPT. Therefore, EPA is establishing BCT limitations equal to BPT for these five subcategories.

The candidate technology for BCT for three other subcategories (characterized as remote Alaskan subcategories) and for the remote section of five additional subcategories was screening of the wastes and subsequent disposal of these wastes. EPA discovered technical problems with this technology, making it unsuitable as the basis for BCT limitations. The technology relies on solid waste disposal, which can be accomplished in non-remote areas by use of reduction facilities, but in remote areas, these facilities are not economically viable. Land disposal or barging are the most viable solid waste disposal techniques available to remote seafood processors, but these techniques are often not feasible or work only during a portion of the year because of weather. Therefore, EPA is establishing BCT limitations equal to BPT for the following remote seafood subcategories and sections of subcategories: Remote Alaskan Crab Meat Processing,

Remote Alaskan Whole Crab and Crab Section Processing, Remote Alaskan Shrimp Processing, and the remote section of Alaskan Hand-Butchered Salmon Processing, Alaskan Mechanized Salmon Processing, Alaskan Bottom Fish Processing, Alaskan Scallop Processing, and Alaskan Herring Fillet Processing.

The Agency is currently considering a petition from a portion of the Alaskan seafood industry requesting that EPA redesignate certain Alaskan cities from being considered "non-remote" and instead apply the effluent limitations guidelines and standards applicable to remote cities. If this petition were granted, the BPT effluent limitations guidelines for the affected locations would be based on grinding rather than screening technology. On May 18, 1980, EPA temporarily suspended the applicability of the BPT effluent limitations guidelines for non-remote facilities located in Anchorage, Cordova, Juneau, Ketchikan, and Petersburg pending review of the industry's petition (45 FR 32675). This notice explained that during the suspension period, facilities in these cities had agreed to comply with the regulations for the remote Alaskan processors. On January 9, 1981, EPA proposed its response to the petition and, at the same time, extended the suspension of the regulations for the affected cities until EPA makes a final decision on the petition (46 FR 2544). EPA has not yet taken final action on the petition; hence, BPT effluent limitations for the five cities listed above remain suspended.

In today's rulemaking, EPA is establishing some BCT limitations equal to BPT limitations for the cities in question. Therefore, this rulemaking imposes no additional burden on any facility. If,

as a result of the pending petition, there is a change in the designation of a city from "non-remote" to "remote," that change will mean a change in the BPT and BCT effluent limitations that will apply. Since the BCT effluent limitations in this rulemaking establish limitations by cross referencing the BPT effluent limitations, where the BPT effluent limitations are suspended, the BCT effluent limitations will also be considered suspended until the BPT effluent limitations are repromulgated. EPA is promulgating the BCT effluent limitations guidelines in their present form for the affected subcategories to establish the framework to apply BCT effluent limitations in the future.

For the non-remote section of three Alaskan subcategories, EPA has not completed an economic impact analysis and is therefore reserving BCT effluent limitations for Alaskan Hand-Butchered Salmon Processing (non-remote), Alaskan Bottom Fish Processing (non-remote), and Alaskan Scallop Processing (non-remote).

After issuing the former BAT regulations for two other subcategories (Fish Meal and Hand-Shucked Clam Processing), EPA determined that the candidate technology, screening of wastes and process changes, would have resulted in substantial adverse economic impact. For the Fish Meal Processing Subcategory, 12 of the 54 direct discharging plants would probably close as a result of the former BAT regulations. Most of these plants are small facilities. For the Hand-Shucked Clam Processing Subcategory, nine of the 15 direct dischargers would probably close rather than comply with the BCT regulations. These nine plants consist of all of the six small plants and all three of the canned clam plants in the subcategory. Based on these projected

impacts, EPA concludes that the technology is not economically achievable. No other technology was identified as a candidate for BCT. For these reasons, EPA establishes BCT limitations equal to BPT in these subcategories.

The BCT cost test was applied to BCT candidate technologies for the remaining five subcategories. The candidate technology for Farm-Raised Catfish Processing includes screening, grease removal, and aerated lagoons. This technology fails the POTW test, and because no other candidate technology has been identified, BCT limitations are established equal to BPT.

The candidate technology for the remaining four subcategories relies on simple in-plant controls, which have only minimal costs and pass the POTW test. Since the incremental cost between BPT and BCT is considered to be zero, the second test ratio is also considered to be zero, and the technology passes the second test. Thus, EPA has determined that in-plant controls are technically feasible, economically achievable, and pass both parts of the BCT cost test for Pacific Coast Hand-Shucked Oyster Processing, Atlantic and Gulf Coast Hand-Shucked Oyster Processing, Non-Alaskan Scallop Processing, and Abalone Processing. The Agency proposed BCT limitations based on in-plant controls for these four subcategories and specifically requested comments on the proposed decision. The Agency did not receive any adverse comments in response to that request, and no new information has been evaluated. Therefore, BCT limitations for those four subcategories are established based on in-plant controls. The final BCT limitations for this industry are the same as the BCT regulations that were proposed in 1982.

5. Sugar Processing (40 CFR Part 409)

There are eight subcategories in this industry. For two subcategories, BPT regulations require zero discharge of process wastewater. No technology more stringent than zero discharge exists and BCT cannot be established at a level less stringent than BPT. Therefore, EPA considers BCT requirements of zero discharge to be reasonable and is establishing BCT limitations equal to BPT for the Florida and Texas Raw Cane Sugar Processing Subcategory and the Hawaiian Raw Cane Sugar Processing Subcategory.

For the remaining six subcategories, EPA is also establishing BCT limitations equal to BPT because the candidate BCT technology fails the BCT cost test and no other candidate technology more stringent than BPT has been identified. These subcategories are Crystalline Cane Sugar Refining, Liquid Cane Sugar Refining, Louisiana Raw Cane Sugar Processing, Puerto Rican Raw Cane Sugar Processing, Hilo-Hamakua Coast of the Island of Hawaii Raw Cane Sugar Processing, and Beet Sugar Processing. For the first two of these six subcategories, the candidate technology is recirculation of barometric condenser cooling water and discharge of blowdown to an upgraded biological system. For the next two subcategories, the candidate technology is recycle of barometric condenser cooling water and cane wash water with the blowdown going to biological treatment. For the Hilo-Hamakua Coast subcategory, the candidate technology is recirculation of barometric condenser cooling water and biological treatment of both cane wash water and the blowdown from the recirculation system. For Beet Sugar Processing, the candidate technology is zero discharge of barometric condenser cooling water. Final BCT effluent limitations for all eight subcategories are the same as were proposed in 1982.

6. Cement Manufacturing (40 CFR Part 411)

Two of the three subcategories (Nonleaching and Materials Storage Piles Runoff) have BCT limitations equal to BPT. The Agency has not identified any other candidate technology that provides additional control of conventional pollutants and, therefore, BCT effluent limitations in those two subcategories remain unchanged by this rule-making. The BCT candidate technology for the remaining subcategory, Leaching, is treatment and reuse. This technology fails the BCT cost test, no other candidate technology has been identified, and BCT limitations are established equal to BPT. This action is the same as the 1982 proposed action for the Leaching Subcategory.

7. Feedlots (40 CFR Part 412)

The Feedlots category consists of two subcategories. For the first (All Subcategories Except Ducks), BCT limitations are primarily based on zero discharge of process wastewater pollutants. The 1982 proposed action for this subcategory would have removed the section for BCT effluent limitations because the existing BCT limitations are more stringent than BPT limitations due to the rainfall event specified for discharge of pollutants from the overflow. The Agency has not evaluated the cost of the more stringent overflow restriction according to the BCT methodology. Therefore, the existing section is removed and reserved. The existing BAT limitations, however, remain unchanged; they also require zero discharge of process waste pollutants with the more restrictive condition for discharge from overflow.

For the second subcategory (Ducks), conventional pollutant discharges from man-made or natural (e.g., marshes) swimwater areas are difficult to quantify. These discharges are also difficult to adapt to traditional end-of-pipe treatment technologies. The technology

basis for BAT (and the candidate BCT technology) was dry lots, but the effluent reduction benefits between existing discharges and dry lots cannot readily be quantified. Therefore, the BCT cost test cannot be performed. EPA did not propose, and is not now establishing BCT effluent limitations guidelines for duck feedlots.

8. Fertilizer (40 CFR Part 418)

The Agency has not established effluent limitations guidelines to control conventional pollutant discharges for three of the seven subcategories in this category: Urea, Ammonium Nitrate, and Nitric Acid. The existing BPT and BAT requirements for those subcategories do not address conventional pollutants. Therefore, no action is taken with respect to BCT for these three subcategories; there are no BCT effluent limitations guidelines. For two other subcategories (Ammonium Sulfate Production and Mixed and Blend Fertilizer Production), BCT limitations based on zero discharge of process wastewater pollutants have already been promulgated. In both of these subcategories, the BPT regulations are also based on zero discharge and, therefore, no evaluation by the BCT cost test is necessary.

For the Phosphate Subcategory, BCT limitations based on zero discharge have already been promulgated but with discharge allowances for specified rainfall events. No more stringent candidate technology for control of conventional pollutants has been identified; the existing BCT limitations for the Phosphate Fertilizer Subcategory remain unchanged. On July 25, 1984, the Agency proposed to amend the applicability section for Phosphate Fertilizer to exclude four plants in Louisiana from BAT and BCT effluent limitations (49 FR 29977). Final action on this amendment is pending and is not affected by today's rulemaking.

For the Ammonia Subcategory, BCT limitations have already been promulgated equal to BPT. The Agency has not identified any other candidate technologies that would result in additional control of conventional pollutants. Therefore, no change is being made to the BCT effluent limitations for this subcategory. The BAT limitations for the Ammonia Subcategory are being revised to remove the limitation for pH, which is a conventional pollutant and cannot be included in the BAT limitations. Instead, it is included in the BCT limitations.

This rulemaking also includes minor editorial corrections for the Phosphate and Ammonia Subcategories to correct the titles in the table of contents.

9. Phosphate Manufacturing (40 CFR Part 422)

The Phosphate category covers six subcategories. Three subcategories (Phosphorus Production, Phosphorus Consuming, and Phosphate) do not have any regulations in effect; they consist of applicability sections only. EPA is not establishing BCT limitations for these subcategories at this time. Two other subcategories (Defluorinated Phosphate Rock and Defluorinated Phosphoric Acid) already have BCT limitations equal to BPT; no further analysis is required because both regulations are based on zero discharge with effluent limitations for specified rainfall events. The existing BCT requirements for these subcategories remain unchanged by this final action. For the remaining subcategory, Sodium Phosphates, the candidate technology is increased recirculation of process wastewater, which passes the BCT cost test. The incremental costs are estimated to be minimal in that any costs attributed to reducing the flow

to the treatment system are offset by the smaller amount of lime needed. Therefore, BCT limitations at the BAT level of control are reasonable and are so established. This level of control is the same as was proposed in 1982.

10. Ferroalloy Manufacturing (40 CFR Part 424)

One of the seven subcategories (Other Calcium Carbide Furnaces) has BCT limitations equal to BPT already in effect; both BCT and BPT require zero discharge of process wastewater pollutants. No other technology provides additional control and therefore, the existing BCT limitations remain unchanged. Candidate technologies for the remaining six subcategories rely on partial recycle and physical-chemical treatment of blowdown (plus filtration for the Calcium Carbide Furnace Subcategory), which fails the cost test. No other candidate technologies have been identified and, therefore, BCT limitations are established equal to BPT for these subcategories.

This final action encompasses one change from the BCT limitations proposed in 1982. When the candidate technology for the Slag Processing Subcategory was evaluated with the 1982 proposed benchmarks, it passed the cost test, and BCT limitations were proposed at a level more stringent than BPT limitations. The benchmarks in this final action are lower than the benchmarks proposed in 1982, and while the candidate technology for the Slag Processing Subcategory still passes the POTW test, it fails the industry cost test. Therefore, BCT limitations are established at a less stringent level of control than was proposed (i.e., equal to BPT instead of equal to BAT).

11. Glass Manufacturing (40 CFR Part 426)

Two of the 13 subcategories (Sheet Glass and Rolled Glass) have BCT and BPT requirements based on zero discharge already in effect; those subcategories remain unchanged by this final action. Candidate technologies for eight other subcategories are as follows. For the Plate Glass Subcategory, the candidate technology is effluent recycle and sand filtration. For Float Glass, Automotive Glass Tempering, and Automotive Glass Laminating, the candidate technology is diatomaceous earth filtration. For the Glass Container Subcategory, the technology is recirculation of cullet quench water, dissolved air flotation, and diatomaceous earth filtration of the blowdown. The candidate technology for Glass Tubing is the same as for Glass Container without dissolved air flotation. For the Television Picture Tube Envelope Subcategory, the candidate technology is sand filtration. For the Incandescent Lamp Envelope Subcategory, the technology is sand filtration for frosting wastewaters and diatomaceous earth filtration of the cullet quench water. These technologies fail the BCT cost test, and no other candidate technology has been identified. For these reasons, BCT limitations were proposed and are now established equal to BPT for those eight subcategories.

For the Insulation Fiberglass Subcategory, BPT requirements are based on zero discharge with specific limitations on the discharge of conventional pollutants from wet air pollution control devices. The candidate BCT technology is zero discharge from all sources, including air pollution control devices. The Agency lacks sufficient data to

quantitatively evaluate the candidate BCT technology with the BCT cost test. However, based on estimates of the incremental cost of additional flow restrictions (which are crucial to the candidate technology), the Agency believes the candidate technology is not cost reasonable and is establishing BCT limitations equal to BPT.

In the Hand Pressed and Blown Glass Subcategory, there are no BPT effluent limitations for any pollutants. The Agency is considering proposing BPT regulations that would result in a nationally applicable base level of treatment being required for this subcategory. Effluent limitations based on BCT will be evaluated at the same time. Therefore, BCT limitations for the Hand Pressed and Blown Glass Subcategory are being removed and reserved. This rulemaking also includes revisions to the BAT limitations for the Hand Pressed and Blown Glass Subcategory and the Incandescent Lamp Envelope Subcategory. The corrections remove conventional pollutant limitations from the BAT sections in those subcategories.

The remaining subcategory, Machine Pressed and Blown Glass Manufacturing, has been reserved. No regulations are currently in effect, and no action is taken with regard to BCT limitations.

12. Asbestos Manufacturing (40 CFR Part 427)

One of the 11 subcategories, Solvent Recovery, has BCT limitations equal to BPT already in effect. No other technology for removing conventional pollutants has been identified, and the existing BCT limitations for this subcategory are not affected by this rulemaking. For the remaining ten subcategories, no action is being taken with respect to BCT limitations. BCT limitations have not been proposed for any of these ten subcategories, and therefore, none are established at this time.

13. Meat Products (40 CFR Part 432)

The original BAT limitations for eight of the ten subcategories in this category were based on nitrification. Those BAT limitations were subsequently withdrawn, pending a review of the feasibility of that technology. The Agency concluded that biological nitrification was not a suitable technology basis for BCT. One significant factor is that nitrification effects removal of ammonia nitrogen from these wastewaters, but affords only small removals of conventional pollutants beyond BPT levels. Further, a key part of the former BAT limitations was reduction in water use in meat processing operations, which may not be achievable in many plants. Finally, preliminary results of the technology review indicated that consistent, year-round removal of conventional pollutants beyond BPT is technically achievable only with extraordinary operational care. For these reasons, EPA has rejected nitrification as the basis for BCT. No other technologies have been identified, and BCT limitations are therefore established equal to BPT for the eight subcategories.

For the remaining two subcategories, Small Processors and Renderers, the candidate technology is in-plant controls (the former BAT). This technology passes the BCT cost test, and BCT limitations are established at the BAT level of control. For both subcategories, the incremental costs associated with the former BAT limitations are minimal. The Agency concluded that these costs were reasonable and proposed, and now promulgates, BCT limitations accordingly. The Agency did not receive any comments objecting to the proposed level of control.

14. Mineral Mining and Processing (40 CFR Part 436)

This category contains 38 subcategories; 17 have no regulations in effect; the remainder have BPT regulations only. While some of the BPT regulations are based on zero discharge of process wastewater pollutants, the Agency has not yet proposed any BCT limitations for this category. This final rulemaking does not contain regulations for any of the subparts of this category.

Region 2 George
Jim Hacklar - Secretary's number
(Kemp) 264-5253 { contact George Meyer }
264-2911

scrubber water, noncontact cooling water only.
→ no compliance problems

pending approval by EQB, temp shall be such

6/19/86

For File

Star Kist

previous production based on production data available
at time permit first drafted (mid 1985)

$$\frac{500(2000)}{0.69} = 1.44 \quad \text{roughly} \quad 0.69 \text{ GPD/lbs/D}$$

Correspondence 6/11/86 from Star Kist

$$\frac{\frac{400(2000)}{1,800,000} + \frac{410(2000)}{1,900,000}}{2} = 0.44$$

$$\frac{500(2000)}{0.44} = 2,283,044 \text{ gpd}$$

300 tons, approx. 2.28 MGD

Avg. Flow = 1.85 MGD

Max Flow = 2.28 MGD

Diversion to OOT

Avg Flow = 1.18 MGD

Max Flow = 2.00 MGD

500 tons \rightarrow 1000 1000 lbs.

Originally applied for

| | | | | | | |
|---|--------------|---------------|-----------|----------------|------------|--------|
| ? | 300 tons/day | \Rightarrow | 0.899 MGD | .67 | + .538 MGD | 0.4125 |
| ? | 450 | \Rightarrow | 1.066 MGD | .84 | | |
| ? | 500 | \Rightarrow | 1.568 MGD | .64 | | |

Based on 1983-84 production figures, permit used
500 tons/day, 1.44 MGD

Quest

MoT is 41,418 ^{BOD} Number based on 300 tons or 500 tons?

| | | | | | |
|-----|----------|---|---------------------------|---|---|
| avg | 1.44 MGD | = | ^{Proc.} .899 MGD | + | ^{cooling water, etc} 0.538 MGD |
| max | 2.57 | = | 1.568 | + | 1.0 |

Now

$$41418 \left(\frac{500}{300} \right) = \frac{69030}{.4}$$

$$27612 \times .5 = 13806$$

$$69030 - 13806 = 55,224$$

OK.

$$16000 = 1.44 \times 8.34 \times$$

$$x = \frac{16000}{1.44(8.34)}$$

$$\text{BOD} = 1332.3 \text{ mg/l}$$

$$\text{BOD} = (\text{DO}_1 - \text{DO}_2) \times df$$

$$.75 \text{ sat.} \quad 5.0 \text{ mg/L}$$

0206A

Max.
(daily) 1.568 MGD
60-day) 1.066

LTA

0.899 MGD

$$\frac{300(2000) \text{ lbs/D}}{899000 \text{ GPD}} = 0.67$$

$$\frac{500(2000) \text{ lbs/D}}{X \text{ GPD}} = 0.67$$

$$X = 1.498 \sim 1.5 \text{ MGD}$$

$$\frac{500}{300} (1.568) = 2.61$$

1.54

$$\frac{1,000,000}{1,440,000} = 0.69$$

Now

$$\frac{400(2000)}{1,800,000} = 0.44$$

$$\frac{500(2000)}{X} = 0.44$$

$$X = 2.25 \text{ MGD Maximum}$$

~~No weekends
2080 hrs/yr →
260 days/yr~~

Avg

360 tons/day

$$\frac{360(2000)}{.44} = 1,636$$

Avg → 1.85 MGD
max → 2.27

0207A

D. Collier
D. Leering
J. Nauman
F. Hackman

M.M.N
KHS

* Standards not approved based on Corps methodology

6/12/86

Issue

Compliance: point of discharge
mixing zone = whole harbor

The canneries discharge 96.8% of pollutants to harbor.

208

→ TMDL WLA ← look into

303

• one could but don't plan on it

Final draft of study

EPA has provided no written or verbal comments to ASG on CH2MHill report

~~Dis~~ pl letter

① Look at production calculations again

② pH - seawater buffered; don't understand why have to meet was

→ add 1% deviation ok.

→ Starkist to double check if will still be out of compliance

→ we look into wider range (beyond end-of-pipe)

3) BOD present in waste stream
has to be addressed

→ Check Tuna Cannery; ^{Guidelines} newest in FR ←

then, on technology basis wouldn't include BOD

look at calculations again. Compare DO → BOD₅
(check Denver report) Should BOD be included to
ensure compliance w/WQS
• check DO monitoring reports

4) a) tonnage: check

b) compliance ~~schedule~~: they want 3 yrs 3 mos

c) Canneries' perceptions is that ASG will ~~certify~~ certify
that segregation of wastes will bring into compliance
→ Sheila?

{ what does 96.8% figure represent?
does it ~~even~~ include nonpoint sources,
rainfall, ships in harbor? }

Hackman : wants draft state certification
copy of any correspondence w/ASG on above

Page 5

5) Nets - overall ~~and~~ separation vs combined flows
more dilute waste, less removal

002 is storm drain under dock
temp. 80-100°F

high temp - corrosion } keep away from
odors } process

will be transmitting new data on the streams characteri-
zations

mixing zone for thermal properties?
sampling this week. ~ 2 weeks

6) Storm water : analyze w/non process determination

* Van Camp rechlorinates all water takes into
Canney

7) Bottoms sediments sampling : check basis, WQS

8) temperature : zone of mixing?
85°F WQS at end of pipe

9) compliance schedule

12 mos.
6 → ~~12~~ mos. interim limits
1 year to do it - Buy materials, ship to Samoa, get vessels
3 mos. to meet w/ASG + consultants
get approvals

Public Notice July 1-15th
30 days
effective date after final

Design based on 1 year to get everything
once permit issued
will also need different ocean dumping vessel
done on yearly contract

Permit No. AS00000019

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et. seq.; the "Act"),

Star-Kist Samoa, Inc.
P.O. Box 368
Pago Pago, Tutuila
American Samoa 96799

is authorized to discharge

tuna processing wastewater (discharge 001 at 14° 16' 37" S latitude,
170° 41' 10" W longitude)

storm water runoff (discharge 002 at 14° 16' 37" S latitude,
170° 41' 12" W longitude)

from the Star-Kist Samoa Tuna Cannery located at Pago Pago, American Samoa to receiving waters named Pago Pago Harbor

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III hereof.

This permit shall become effective on , 1985.

This permit and the authorization to discharge shall expire at midnight, , 1990.

Signed this day of , 1985

For the Regional Administrator

Director, Water Management Division

Part I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (based on a maximum production rate of 500 tons/day of seafood processed and an approximate flow rate of 1.44 MGD)

1. During the period beginning with the effective date of this permit and lasting through (6 months), the permittee is authorized to discharge from Outfall Serial No. 001 (tuna processing wastewater).

a. Such discharges shall be limited and monitored by the permittee as specified below:

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> | | | <u>Monitoring Requirements</u> | |
|---|--|----------------------|--|--------------------------------|--------------------|
| | <u>loading</u> | | <u>concentration</u> | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| | <u>Monthly Average</u> | <u>Daily Maximum</u> | <u>in mg/l</u> <u>Monthly Average</u> | | |
| Flow (MGD) | (d) | (d) | - | Continuous | Continuous |
| Temperature (°F) | (d) | 90 | - | Continuous | Continuous |
| BOD5 (lbs/day) | (d) | (d) | (d) | Twice weekly | Composite |
| pH (Standard Units) | Not less than 6.5 and not greater than 8.6 | | | Continuous | Continuous |
| Total Suspended Solids (lbs/day) | 3,300 | 8,300 | (d) | Twice weekly | Composite |
| Total Suspended Solids (lbs/1000 lbs seafood) | 3.3 | 8.3 | - | Twice weekly | Calculated |
| Oil and Grease (a)(b) (lbs/day) | 840 | 2,100 | (d) | Twice weekly | Composite |
| Oil and Grease (a)(b) (lbs/1000 lbs seafood) | 0.84 | 2.1 | - | Twice weekly | Calculated |
| Total Nitrogen (b) (lbs/day) | (d) | (d) | (d) | Twice weekly | Composite |
| Total Phosphorus (b) (lbs/day) | (d) | (d) | (d) | Twice weekly | Composite |

(a) The test procedure for the analysis of oil and grease shall comply with the method described in the manual of "Methods for Chemical Analysis of Water and Wastes," 1974, EPA, Methods Development and Quality Assurance Research Laboratory, page 229 (with written EPA approval for non-substantive changes) or an alternate procedure approved in accordance with the procedures specified in regulations published pursuant to Section 304(h) of the Act.

(b) Samples shall be taken concurrently.

(d) Reporting required only.

Part I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (based on a maximum production rate of 500 tons/day of seafood processed and an approximate flow rate of 1.44 MGD)

2. During the period beginning (6 months) and lasting through (2 years), the permittee is authorized to discharge from Outfall Serial No. 001 (tuna processing wastewater).

a. Such discharges shall be limited and monitored by the permittee as specified below:

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> | | | <u>Monitoring Requirements</u> | |
|---|--|--------------------------|----------------------------------|----------------------------------|------------------------|
| | <u>loading</u> | | <u>concentration in mg/l</u> | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| | <u>Monthly Average</u> | <u>Daily Maximum</u> | | | |
| Flow (MGD) | (d) | (d) | - | Continuous | Continuous |
| Temperature (°F) | (d) | 90 | - | Continuous | Continuous |
| BOD5 (lbs/day) | 16,000 | 33,000 | (d) | Twice weekly | Composite |
| pH (Standard Units) | Not less than 6.5 and not greater than 8.6 | | | Continuous | Continuous |
| Total Suspended Solids (lbs/day) | 3,300 | 8,300 | (d) | Twice weekly | Composite |
| Total Suspended Solids (lbs/1000 lbs seafood) | 3.3 | 8.3 | - | Twice weekly | Calculated |
| Oil and Grease (a)(b) (lbs/day) | 840 | 2,100 | (d) | Twice weekly | Composite |
| Oil and Grease (a)(b) (lbs/1000 lbs seafood) | 0.84 | 2.1 | - | Twice weekly | Calculated |
| Total Nitrogen (b) (lbs/day) | 1,300 | 2,600 | (d) | Twice weekly | Composite |
| Total Phosphorus (b) (lbs/day) | 260 | 450 | (d) | Twice weekly | Composite |

(a) The test procedure for the analysis of oil and grease shall comply with the method described in the manual of "Methods for Chemical Analysis of Water and Wastes," 1974, EPA, Methods Development and Quality Assurance Research Laboratory, page 229 (with written EPA approval for non-substantive changes) or an alternate procedure approved in accordance with the procedures specified in regulations published pursuant to Section 304(h) of the Act.

(b) Samples shall be taken concurrently.

(d) Reporting required only.

Part I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (based on a maximum production rate of 500 tons/day of seafood processed and an approximate flow rate of 1.44 MGD)

3. During the period beginning with (2 years) and lasting through (five years), the permittee is authorized to discharge from Outfall Serial No. 001 (tuna processing wastewater).

a. Such discharges shall be limited and monitored by the permittee as specified below:

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> | | | <u>Monitoring Requirements</u> | |
|---|--|----------------------|--|--------------------------------|--------------------|
| | <u>loading</u> | | <u>concentration</u> | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| | <u>Monthly Average</u> | <u>Daily Maximum</u> | <u>in mg/l</u> <u>Monthly Average</u> | | |
| Flow (MGD) | (d) | (d) | - | Continuous | Continuous |
| Temperature (°F) | (d) | 85 | - | Continuous | Continuous |
| BOD5 (lbs/day) | 16,000 | 33,000 | (d) | Twice weekly | Composite |
| pH (Standard Units) | Not less than 6.5 and not greater than 8.6 | | | Continuous | Continuous |
| Total Suspended Solids (lbs/day) | 3,300 | 8,300 | (d) | Twice weekly | Composite |
| Total Suspended Solids (lbs/1000 lbs seafood) | 3.3 | 8.3 | - | Twice weekly | Calculated |
| Oil and Grease (a)(b) (lbs/day) | 840 | 2,100 | (d) | Twice weekly | Composite |
| Oil and Grease (a)(b) (lbs/1000 lbs seafood) | 0.84 | 2.1 | - | Twice weekly | Calculated |
| Total Nitrogen (b)(c) | - | - | 0.20 | Twice weekly | Composite |
| Total Phosphorus (b)(c) | - | - | 0.03 | Twice weekly | Composite |

(a) The test procedure for the analysis of oil and grease shall comply with the method described in the manual of "Methods for Chemical Analysis of Water and Wastes," 1974, EPA, Methods Development and Quality Assurance Research Laboratory, page 229 (with written EPA approval for non-substantive changes) or an alternate procedure approved in accordance with the procedures specified in regulations published pursuant to Section 304(h) of the Act.

(b) Samples shall be taken concurrently.

(c) Median monthly value may not exceed the given limitation. In addition, 10% of the sample results obtained during the month may not exceed 0.35 mg/l for total nitrogen, or 0.06 mg/l for total phosphorus.

(d) Reporting required only.

Part I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (based on a maximum production rate of 500 tons/day of seafood processed and an approximate flow rate of 1.44 MGD)

4. During the period beginning with the effective date of this permit and lasting through (five years), the permittee is authorized to discharge from Outfall Serial No. 002 (storm water runoff).

a. Such discharges shall be limited and monitored by the permittee as specified below:

| <u>Effluent Characteristic</u> | <u>Discharge Limitations</u> | | | <u>Monitoring Requirements</u> | |
|--------------------------------|--|----------------------|--|--------------------------------|--------------------|
| | <u>loading</u> | | <u>concentration</u> | <u>Measurement Frequency</u> | <u>Sample Type</u> |
| | <u>Monthly Average</u> | <u>Daily Maximum</u> | <u>in mg/l</u> <u>Monthly Maximum</u> | | |
| Temperature (°F) | - | - | 85 | (e) | Discrete |
| pH (Standard Units) | Not less than 6.5 and not greater than 8.6 | | | (f) | Discrete |
| Turbidity (NTU)(c) | - | - | 0.75 | (f) | Discrete |
| Oil and Grease (a)(b) | - | - | 15 | (f) | Discrete |
| Total Nitrogen (b)(c) | - | - | 0.20 | (f) | Discrete |
| Total Phosphorus (b)(c) | - | - | 0.03 | (f) | Discrete |

(a) The test procedure for the analysis of oil and grease shall comply with the method described in the manual of "Methods for Chemical Analysis of Water and Wastes," 1974, EPA, Methods Development and Quality Assurance Research Laboratory, page 229 (with written EPA approval for non-substantive changes) or an alternate procedure approved in accordance with the procedures specified in regulations published pursuant to Section 304(h) of the Act.

(b) Samples shall be taken concurrently.

(c) Median monthly value may not exceed the given limitation. In addition, 10% of the sample results obtained during the month may not exceed 0.35 mg/l for total nitrogen, or 0.06 mg/l for total phosphorus, or 1.0 NTU for turbidity.

(e) Samples shall be taken once per discharge.

(f) Samples shall be taken during the first hour of each discharge except that no more than one sample per month is required.

5. During the period beginning with the effective date of this permit and lasting through (five years), the discharges from Outfall Serial No. 001 and Outfall Serial No. 002 shall also be limited and monitored by the permittee as follows:
 - a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
 - b. Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge of Outfall Serial No. 001 and Outfall Serial No. 002. Effluent samples shall be taken downstream from the treatment works prior to mixing with the receiving waters.
 - c. There shall be no discharge of toxic substances that violate the water quality standards for the Territory of American Samoa.
 - d. The discharge shall not cause objectionable odors at the surface of the receiving waters.
 - e. Samples shall be taken and analyzed for toxic substances as follows:
 - i) Cannery effluent shall be sampled and reported twice yearly at the discharges of Outfall Serial No. 001 and Outfall Serial No. 002 for cadmium, chromium, lead, mercury, and zinc.
 - ii) The bottom sediments of Pago Pago Harbor shall be sampled and reported once yearly at locations 50 feet from the discharges of Outfall Serial No. 001 and Outfall Serial No. 002 at a control location selected by the permittee for total volatile solids, total oil and grease, cadmium, chromium, lead, mercury, and zinc. The control location must be within Pago Pago Harbor away from the influence of the cannery discharges and any other harbor discharges. The control location must be approved by EPA, Region 9.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall comply with effluent limitations established in Part I.A. in accordance with the following schedule of compliance.

The permittee shall:

- a. Achieve compliance with the effluent limits established in Parts I.A.1., I.A.4., and I.A.5. by the effective date of this permit.
- b. Achieve compliance with the effluent limits established in Part I.A.2. by.....(6 months)
- c. Submit a report to EPA and Government of American Samoa confirming compliance with the Part I.A.2. effluent limits by.....(6 mo + 14 days)
- d. Submit a report to EPA and Government of American Samoa which evaluates progress towards achieving compliance with effluent limits necessary for achieving water quality standards set forth in Part I.A.3. by.....(1 year)
- e. Achieve compliance with the effluent limits necessary for achieving water quality standards set forth in Part I.A.3 by.....(2 years)
- f. Submit a report to EPA and Government of American Samoa confirming compliance with the effluent limits necessary for achieving water quality standards set forth in Part I.A.3 by.....(2 years + 14 days)

C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

3. Penalties for Tampering

The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

4. Reporting of Monitoring Results

Monitoring results obtained during the previous 3 months shall be summarized for each month and submitted quarterly on forms to be supplied by the Regional Administrator, to the extent that the information reported may be entered on the forms. The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this permit. Unless otherwise specified, discharge flows shall be reported in terms of the average flow over each 30-day period and the maximum daily flow over that 30-day period. Monitoring reports shall be postmarked no later than the 28th day of the month following the completed reporting period. The first report is due on

. Signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and the Government of American Samoa at the following address:

Regional Administrator
Environmental Protection Agency
Region 9, Attn: W-1-1
215 Fremont Street
San Francisco, CA 94105

Executive Secretary
Environmental Quality Commission
Government of American Samoa
Tutuila, Pago Pago
American Samoa 96920

5. Definitions

- a. The "monthly average" discharge means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the monthly average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.
- b. The "daily maximum" discharge means the total discharge by weight during any calendar day.
- c. A "discrete" sample means any individual sample collected in less than 15 minutes.
- d. A "composite sample" means a combination of no fewer than eight individual samples obtained at equal time intervals over the production period of the day of sampling. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling.
- e. "Seafood" means the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in the permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

7. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Regional Administrator in the permit.

8. Intermittent Discharge Monitoring

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the permittee shall monitor and record data for all the characteristics listed in the monitoring requirements, after which the frequencies of analysis listed in the monitoring requirements shall apply for the duration of each such intermittent discharge. In no event shall the permittee be required to monitor and record data more often than twice the frequencies listed in the monitoring requirements.

9. Monitoring Modification

0220 Monitoring, analytical, and reporting requirements may be modified by the Regional Administrator upon due notice.

10. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit for a period of at least three (3) years from the date of the sample, measurement, or report. This period may be extended by request of the Regional Administrator at any time.

11. Records Content

Records of monitoring information shall include:

- a. The date, place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

12. Inspection and Entry

The permittee shall allow the Regional Administrator, or the Executive Secretary, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location. If samples are taken, the permittee shall be given split samples upon request.

D. REPORTING REQUIREMENTS

1. Anticipated Noncompliance

The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

2. Compliance Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

3. Monitoring Reports

Monitoring results shall be reported at the intervals specified in Part I.C.4. of this permit.

4. Twenty-Four Hour Reporting of Noncompliance

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following shall be included as information which must be reported within 24 hours:

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any upset which exceeds any effluent limitation in the permit; and
- c. Violation of a maximum daily discharge limitation for any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous substance, listed as such by the Regional Administrator in the permit to be reported within 24 hours.

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Part I.D.4. at the time monitoring reports are submitted. The reports shall contain the information listed in Part I.D.4.

6. Signatory Requirements

a. Applications. All permit applications shall be signed as follows:

- (1) For a corporation: by a responsible corporate officer. For the purposes of this section, a responsible corporate officer means (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (b) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) For a partnership or sole proprietorship: by a general partner or proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (a) the chief executive officer of the agency, or (b) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. Reports. All reports required by permits and other information requested by the Regional Administrator shall be signed by a person described in paragraph a. of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described in paragraph a. of this section;
- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and
- (3) The written authorization is submitted to the Regional Administrator.

- c. Changes to authorization. If an authorization under paragraph b. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this section must be submitted to the Regional Administrator prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under paragraphs a. or b. of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7. Duty to Provide Information

The permittee shall furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Regional Administrator upon request, copies of records required to be kept by this permit.

8. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Administrator. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

9. Penalties for Falsification of Reports

The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

10. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR § 122.29 (b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR § 122.42 (a)(1).

Part II

A. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxilliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Definitions

- (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which are reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations

The permittees may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this section.

c. Notice

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, he shall submit prior notice, if possible, at least 10 days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part I.D.4. (24-hour notice).

d. Prohibition of bypass

- (1) Bypass is prohibited, and the Regional Administrator may take enforcement action against the permittee for bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxilliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (c) The permittee submitted notices as required under paragraph c. of this section.
- (2) The Regional Administrator may approve an anticipated bypass, after considering its adverse effects, if he determines that it will meet the three conditions listed above in paragraph d.(1) of this section.

4. Upset Conditions

a. Definition

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph c of this section are met. No determination made during administrative review of claims that noncompliance was caused by an upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated;
- (3) The permittee submitted notice of the upset as required in Part I.D.4. (24-hour notice); and
- (4) The permittee complied with any remedial measures required under Part II.B.4. (duty to mitigate).

d. Burden of proof

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

B. GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

2. Duty to Comply with Toxic Effluent Standards

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

3. Penalties for Violation of Permit Conditions

The Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing sections 301, 302, 306, 307, or 308 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both.

4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or notification of planned changes and anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

Notwithstanding Part II.B.5. above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revoked and reissued or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

7. Transfers

This permit is not transferable to any person except after notice to the Regional Administrator. The Regional Administrator may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

8. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Regional Administrator.

9. Civil and Criminal Liability

Except as provided in permit conditions on "Bypasses" (Part II.A.3.) and "Upsets" (Part II.A.4.), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

10. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Act.

11. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

12. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property, or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

13. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART III

A. REAPPLICATION

If the permittee desires to continue an activity regulated by this permit after the expiration of the permit, the permittee must apply for and obtain a new permit.

B. NOTIFICATION REQUIREMENTS

The permittee must notify the Regional Administrator as soon as they know or have reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(a) One hundred micrograms per liter (100 ug/l);

(b) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21 (g)(9).

C. ZONE OF MIXING

If the Government of American Samoa grants a zone of mixing, this permit may be reopened and modified at that time to include new effluent limits and monitoring requirements based on the zone of mixing.

3/11/85 call from Jeff Neumann
Star Kist

Several Violations of Temperature

90° limit on process stream / 85° Intake
Jeff Neumann said "I don't think they would
fit in the pipe" (retort + Scrubber into process pipe)

Data on outfall two indicates
they know where these
discharges go. Samples were taken for
Retort & Scrubber separately for form 2c.

30% removal
40% removal

| | | | |
|---------|---|-----|---------------|
| 3.5 ppm | N | net | background 14 |
| 17 ppm | P | net | background .3 |

120° Scrubber water
110° Retort water

MAR 7 1985

PLUME Analysis Request from Government of American Samoa for
Tuna Cannery Mixing Zone Applications.

Paul S. Gjording
Environmental Engineer

Danny Collier
Project Officer, American Samoa

THRU: Ken Sutherland
Chief, Permits and Pretreatment Section

THRU: William H. Pierce
Chief, Permits and Compliance Branch

On February 11, 1985, I received informally from you the attached letter from Ralph Fulgham requesting assistance with PLUME modeling for the zone of mixing applications he had received from Star-Kist Samoa, Inc., Samoa Packing Co., and the ASG-Utulei Sewage Treatment Plant. In this memo, I would like to summarize my discussions concerning this topic, and my conclusions regarding the mixing zone and modeling. Since there has been no discussion of the Utulei STP application, I will address only the canneries here.

On February 12, 1985 we discussed the cannery mixing zone applications with Ralph Fulgham of American Samoa Government by conference call. This discussion included Pati Faiai of American Samoa Government, Mr. Fulgham, Mr. Collier, and myself. Mr. Fulgham raised the concern that the water quality of the harbor violates the water quality standards at this time. This condition implies that dilution of cannery effluent with the ambient harbor water could not help to reduce the concentrations of effluent pollutants to comply with the water quality standards. In actuality, the only possible way in which water quality standards might be met at the edge of a zone of mixing would be for the effluent to be of higher quality than the water quality standards. Given this situation, the four of us agreed that modeling the initial dilution with PLUME to aid in the evaluation of a mixing zone application, as required by the adopted water quality standards for American Samoa, was not useful.

Furthermore, based on the following existing conditions in the harbor, we agreed that the canneries should receive no zone of mixing, and that their effluent should comply with the water quality standards at the point of discharge until such time as the harbor waters no longer violate the water quality standards:

0233

| CONCURRENCES | | | | | | | |
|--------------|----------|------------|---------|--|--|--|--|
| SYMBOL | Gjording | W-5-1 | W-5-5 | | | | |
| SURNAME | W-5-4 | Sutherland | W | | | | |
| DATE | 3/7/85 | 3/11/85 | 3/13/85 | | | | |

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

- 1) The water quality standards of concern to the cannery (Total Nitrogen and Total Phosphorus) currently are not met in the inner harbor where the canneries discharge.
- 2) Dilution of the effluent in a zone of mixing by water which already violates the water quality standards is of no benefit to water quality in the harbor.
- 3) The current degraded condition of the harbor waters is due in large part to the combined effluents of the two tuna canneries. The canneries contribute up to 97% of the total nitrogen and 96% of the total phosphorus input to the harbor.

Attachment

MEMO

Subject: Record of meeting regarding American Samoa tuna cannery permits 8/21/85.

To: File

From: Paul Gjording

Participants of the meeting were:

Pati Faiai, American Samoa Government
Danny Collier, OTP
Phil Woods, WQS
Sheila Weigman, Oceans and Estuaries
Paul Gjording, Permits

Points raised by Woods:

- ° The canneries have taken little action in recent times to alleviate WO problems in Pago Pago Harbor.
- ° The draft permit provision requiring waste stream segregation would cause a significant improvement in the harbor WO.
- ° The canneries may argue that the permit provision requiring compliance with WQS is not attainable, and may, as a result, decide not to comply with the waste stream segregation requirement.
- ° If the canneries are convinced that attainment of WQS is possible (e.g., by demonstration of a feasible technology), they will have to comply with the waste stream segregation provision.
- ° The permit should contain toxics limits and/or toxicity limits.

Points raised by Gjording:

- ° The permit provision requiring waste stream segregation can no longer be a BCT limit. HQ intends to promulgate BCT=BPT guidelines soon. So, this provision must be an interim compliance schedule limit.
- ° The Joint Study is being conducted in order to determine the best method for the canneries to achieve WQS. As yet, that method is not clear. However, the draft Phase 1 Report strongly suggests immediate implementation of waste stream segregation as a simple method of improving water quality, and as a tool to measure the recovery response of the harbor. The Phase 2 Report will examine this plan also.

Conclusion: waste stream segregation should be required by the permit with vigorous enforcement and enough flexibility in the permit to accomodate the implementation of the option to be recommended by the Joint Study for final compliance with WOS. Waste stream segregation should not wait for this recommendation.

cc: Ken Sutherland, Chief, Permits and Pretreatment
Danny Collier, OTP
Norm Lovelace, Chief, OTP
Phil Woods, WQS
Pati Faiai, ASG

• 0236

MAR 7 1985

PLUME Analysis Request from Government of American Samoa for
Tuna Cannery Mixing Zone Applications.

Paul S. Gjording
Environmental Engineer

Danny Collier
Project Officer, American Samoa

THRU: Ken Sutherland
Chief, Permits and Pretreatment Section

THRU: William H. Pierce
Chief, Permits and Compliance Branch

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Furthermore, based on the following existing conditions in the harbor, we agreed that the canneries should receive no zone of mixing, and that their effluent should comply with the water quality standards at the point of discharge until such time as the harbor waters no longer violate the water quality standards:

0237

| CONCURRENCES | | | | | | | |
|--------------|------------|------------|------------|--|--|--|--|
| SYMBOL | W-5-1 | W-5-1 | W-5-1 | | | | |
| SURNAME | Sutherland | Sutherland | Sutherland | | | | |
| DATE | 3/7/85 | 3/11/85 | 3/13/85 | | | | |

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

U.S. GPO : 1984-436-836

- 1) The water quality standards of concern to the cannery (Total Nitrogen and Total Phosphorus) currently are not met in the inner harbor where the canneries discharge.
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- 3) The current degraded condition of the harbor waters is due in large part to the combined effluents of the two tuna canneries. The canneries contribute up to 97% of the total nitrogen and 96% of the total phosphorus input to the harbor.

Attachment

FACT SHEET

NPDES permit AS0000019 Star-Kist Samoa

Description of Discharge

The Star-Kist Samoa tuna cannery is located on Tutuila Island, American Samoa. Process discharges from the cannery enter Pago Pago Harbor at 14° 16' 37" South latitude and 170° 41' 10" West longitude. Storm water discharges enter the harbor at 14° 16' 37" South latitude and 170° 41' 12" West longitude. The cannery receives whole tuna which is processed into canned tuna and dried fish meal. Waste streams from this operation consist mainly of fish waste, fresh water, and sea water which are treated by the Dissolved Air Floation (DAF) process. The DAF sludge is barged to sea for disposal. Approximately 500 tons of fish are processed per day. The resulting discharge is 1.44 MGD.

BCT Determination

The Clean Water Act (the Act) requires compliance with effluent limitations based on the application of Best Conventional Pollutant Control Technology (BCT) no later than July 1, 1984. EPA has proposed BCT limits for tuna processing, but these limits have not been finalized. In such a case, the permit writer is required to exercise Best Professional Judgement in making a determination of the type of pollutant control technology which meets BCT requirements. On October 29, 1982, EPA published proposed effluent guidelines in the Federal Register which set BCT limits equal to Best Practicable Control Technology (BPT). Since these guidelines will soon be published in final, it is the Best Professional Judgement of the permit writer that BCT limits for this facility be set at BPT levels.

Effluent Limitations

The effluent limits set forth in this permit are based on BCT as outlined above. In addition, the permit imposes more stringent final and interim limits in order to bring the discharge into compliance with the Pago Pago Harbor water quality standards. The BCT limits are based on effluent guidelines for tuna processing found at 40 CFR §408 Subpart N. These guidelines contain limits for total suspended solids (TSS), oil and grease (O&G), and pH. The BCT effluent limits must be met immediately. The interim limits may be met by eliminating the high strength press and precooker waste streams from the effluent. These interim limits for BOD, nitrogen, and

phosphorus are based on the increased pollutant control available with waste stream segregation. The interim limits must be met within 6 months. Final limits for total nitrogen and total phosphorus are imposed after two years to ensure that these pollutants do not cause violations of water quality standards in the receiving waters.

Calculation of Effluent Limits

Net value credit has not been granted for any of the pollutants requested in the application as the discharge from the tuna cannery contributes substantially to the presence of these pollutants in the intake water. Regulations found at 40 CFR 122.45 (h)(2) prohibit adjusting "effluent limitations...to the extent that the discharger significantly increases concentrations of pollutants in the intake water..."

All waste streams, including Dryer Scrubber Water, Boiler Blowdown, and Retort Cooling Water must be treated and discharged through the process water outfall 001. Waste streams proposed for discharge from outfall 002 in the permit application contain significant amounts of nitrogen and phosphorus and would contribute to aggravated violation of water quality standards for these parameters if discharged without treatment. Also, the high temperature of these waste streams would violate the water quality standards for temperature. Mixing this thermal discharge in the process discharge will lessen its impact on the receiving water. Storm water runoff may be discharged through the non-process outfall 002. Effluent limitations for the process waste discharge were calculated based on the total flow rates reported in the permit application:

| <u>Maximum</u> | <u>Monthly Average</u> |
|----------------|------------------------|
| 2.57 MGD | 1.44 MGD |

Technology-Based Limits

BCT limits for TSS and O&G are based on the production rate applied for by the permittee, and the production based factors promulgated in the BPT effluent guidelines for the tuna processing point source category. These factors are given as Discharge Limitations in the permit along with mass limitations based on an estimated production rate of 500 tons per day. These BCT limits must be met immediately.

Final Limits Based on Water Quality Standards

The Act also requires that the discharge comply with effluent limitations based on any water quality standards applicable to the receiving waters. In 1981, the American Samoa Government adopted, and EPA approved, Water Quality Standards for American Samoa which contain numerical limits for pollutant concentrations allowed in the waters of Pago Pago Harbor. Water quality limitations for nitrogen, phosphorus, and temperature are shown in the following table:

| <u>Parameter</u> | <u>Median not to exceed given value</u> | <u>Not to exceed given value 10% of the time</u> | <u>Not to exceed given value 2% of the time</u> |
|------------------|---|--|---|
| Total N (mg/l) | 0.20 | 0.35 | 0.50 |
| Total P (mg/l) | 0.03 | 0.06 | 0.09 |

Temperature shall not exceed 85° F at any time.

The pH range shall be 6.5 to 8.6 and be within 0.2 pH units of that which would occur naturally.

These limits must be met within two years. Part III.C. of the permit allows the permit to be reopened and modified to include new limits if a zone of mixing is approved.

Interim Limits

Interim limits are imposed to ensure that progress is made towards compliance with water quality standards. These interim limits may be met by the use of DAF treatment and segregation of high strength press and precooker waters from the plant effluent for disposal at sea. The "Joint Study of Fish Cannery Wastewater Effluent Loading Reduction at Pago Pago Harbor, American Samoa" prepared by CH2M Hill in 1984 discusses this treatment method in depth and strongly suggests its implementation. It is a simple method which would significantly improve the water quality of the harbor. Implementation of this technology is economically reasonable, and results in a discharge similar to that of tuna processing facilities which employ a solubles plant to recover oils from the high strength tuna processing waters. This level of treatment can be accomplished with simple in-plant control modifications. Implementation requires modifications to plant waste water conveyances, which will remove the press and precooker waters from the DAF influent, construction of new tankage to store this flow, and use of a waste transport vessel which has adequate capacity to carry the increased waste volume. These limits must be met within 6 months.

POTW Cost Test

The cost of implementing this treatment method was calculated using the Publicly Owned Treatment Plant (POTW) cost test as described in the proposed BCT effluent guidelines published in the Federal Register on October 29, 1982. The incremental cost per pound of pollutant removed by waste stream segregation was calculated based on the increased removal of BOD.

The incremental cost is composed of two separate costs: capital cost of in-plant modifications to separate press and precooker waters from DAF influent, and the increased costs for the barging of additional wastes to sea for dumping. The capital costs were estimated based on information contained in the "Joint Study" and the "Joint Study Addendum" of January, 1985. The report estimated that the in-plant modifications would cost \$480,000. This cost was then annualized over the predicted life of the proposed modifications and additions. We have assumed a lifetime of 15 years. The resulting cost is \$80,000 per year based on a 15% interest rate. The CH2M Hill report estimated the operating costs and the barging of the additional wastes at \$960 per day.

These costs are used to calculate the cost per pound of BOD removed from the discharge. The effluent BOD reduction resulting from waste stream segregation is calculated based on the following information from the CH2M Hill study (page 3-19)¹, (page 3-7)², and mass loadings as reported in the permit application³:

| <u>Flow</u> | <u>Effluent BOD Load (lbs/day)³</u> | <u>BOD Fraction Contributed by Press & Precooker¹</u> | <u>Press & Precooker BOD Load (lbs/day)</u> | <u>DAF Treatment Efficiency²</u> | <u>Effluent BOD Reduction (lbs/day)</u> |
|-----------------|--|--|---|---|---|
| Daily Maximum | 41,418 | 0.40 | 16,567 | 50% | 8,284 |
| Monthly Average | 20,350 | 0.40 | 8,140 | 50% | 4,070 |

(Since DAF treatment removes 50% of all BOD from the waste water, we can expect that a given reduction of BOD loading to the DAF units would result in an effluent reduction equal to 50% of the influent reduction. So, the incremental BOD reduction in implementing waste stream segregation is 50% of the BOD load of the two segregated streams.)

The cost per pound of BOD removed on average is calculated for the annualized capital costs, and for the operating and barging costs as follows:

Annualized capital costs

$$(\$80,000/\text{yr})/((4,070 \text{ lbs/day})(365 \text{ days/yr})) = \$0.05/\text{lb}$$

Operating and Barging costs

$$(\$960/\text{day})/(4,070 \text{ lbs/day}) = \$0.24/\text{lb}$$

Total incremental cost of segregating waste streams

\$0.29/lb

This pollutant removal cost is comparable to the incremental cost for a POTW to upgrade from secondary to Advanced Secondary Treatment. In the proposed guidelines published on October 29, 1982 and on September 20, 1984, EPA selected economically reasonable treatment technologies based on comparisons of industry cost to the incremental costs for a POTW to upgrade it's treatment. EPA calculated incremental costs for POTW's of \$0.27 and \$0.71 per pound of pollutant removed in 1976 dollars.

Calculation of Interim Limits

The interim BOD limits are based on the elimination of press and precooker BOD loads from the discharge. The limits are calculated as the reported BOD effluent load less the BOD reduction predicted as shown below:

| <u>Flow</u> | <u>Reported BOD Load³</u> | <u>Predicted BOD Reduction</u> | <u>Effluent limit</u> |
|---------------|--------------------------------------|--------------------------------|-----------------------|
| Daily Maximum | 41,418 lbs/day | 8,284 lbs/day | 33,000 lbs/day |
| Monthly Ave. | 20,350 lbs/day | 4,070 lbs/day | 16,000 lbs/day |

The interim nitrogen and phosphorus limits are calculated similarly:

| <u>Flow</u> | <u>Effluent N Load (lbs/day)³</u> | <u>N Fraction Contributed by Press & Precooker¹</u> | <u>Press & Precooker N Load (lbs/day)</u> | <u>DAF Treatment Efficiency²</u> | <u>Effluent N Reduction (lbs/day)</u> |
|-----------------|--|--|---|---|---------------------------------------|
| Daily Maximum | 4,028 | 0.60 | 2,416 | 40% | 1,450 |
| Monthly Average | 2,103 | 0.60 | 1,262 | 40% | 757 |

| <u>Flow</u> | <u>Effluent P Load (lbs/day)³</u> | <u>P Fraction Contributed by Press & Precooker¹</u> | <u>Press & Precooker P Load (lbs/day)</u> | <u>DAF Treatment Efficiency²</u> | <u>Effluent P Reduction (lbs/day)</u> |
|--------------------|--|--|---|---|---|
| Daily Maximum | 707 | 0.60 | 424 | 40% | 255 |
| Monthly Average | 411 | 0.60 | 247 | 40% | 148 |

(Since DAF treatment removes 40% of all nitrogen and phosphorus from the waste water, we can expect that a given reduction of these pollutants to the DAF units would result in an effluent reduction equal to 60% of the influent reduction. So, the incremental nutrient reduction in implementing waste stream segregation is 60% of the nutrient load of the two segregated streams.)

The limits are calculated as the reported effluent loads less the predicted reductions as shown below:

| <u>Flow</u> | <u>Reported N load³</u> | <u>Predicted N reduction</u> | <u>Nitrogen Effluent limit</u> |
|---------------|------------------------------------|----------------------------------|------------------------------------|
| Daily Maximum | 4,028 lbs/day | 1,450 lbs/day | 2,600 lbs/day |
| Monthly Ave. | 2,103 lbs/day | 757 lbs/day | 1,300 lbs/day |

| <u>Flow</u> | <u>Reported P load³</u> | <u>Predicted P reduction</u> | <u>Phosphorus Effluent limit</u> |
|---------------|------------------------------------|----------------------------------|--------------------------------------|
| Daily Maximum | 707 lbs/day | 255 lbs/day | 450 lbs/day |
| Monthly Ave. | 411 lbs/day | 148 lbs/day | 260 lbs/day |

The interim limits must be met within 6 months.

Schedule of Compliance

The permit's schedule of compliance requires the permittee to bring the discharge into compliance with the water quality standards within two years. If, during this time, nitrogen and phosphorus levels in the receiving waters drop due to the removal of press and precooker waters to the point that the water quality standards are no longer violated, it would be possible for the cannery to receive a zone of mixing for these pollutants from the American Samoa Government. A zone of mixing may also be granted for temperature. Part III.C. of the permit allows the permit to be reopened and modified to include new effluent limits and monitoring requirements based on such a zone of mixing.

pH

The effluent limits for pH are based on water quality standards for Pago Pago Harbor. The 1% pH rule can not be applied to these limits as requested in the permit application since the pH limits are required to ensure compliance with the water quality standards. These limits must be met immediately.

Storm Water Limits

Monitoring requirements for the storm water discharge 002 are based on water quality standards. The limit of 15 mg/l oil and grease is imposed to prevent the presence of visible oil and grease in the receiving water.

Procedures for Decision Making

Notice of the Regional Administrator's intent to issue this permit is being sent to

as required by regulations at 40 CFR 124.10. Anyone wishing to comment on the proposed permit may do so in writing for a period of 30 days following the date of public notice. The comment period may be extended at the discretion of the Regional Administrator. Comments should be addressed to:

Paul Gjording (W-5-1)
EPA Region 9
215 Fremont Street
San Francisco, CA 94105

Comments must be received by .

Any interested party may request that a public hearing be held concerning this proposed action. Requests must be in writing and must be received during the 30 day comment period.

For further information, please contact Paul Gjording at (415) 974-7367.



Star-Kist SAMOA, Inc.



P.O. Box 368 • PAGO PAGO • TUTUILA ISLAND • AMERICAN SAMOA

December 19, 1984

Permits & Compliance Branch
Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, California 94105

Subject: NPDES PERMIT RENEWAL, STAR-KIST SAMOA AS0000019

Attached herewith are consolidated permit application forms for renewal of the subject NPDES permit. The present permit expires on March 31, 1985. We previously requested a time extension for filing in order to obtain sample analyses done at a contract laboratory outside of American Samoa.

Star-Kist Samoa Inc. has made substantial changes in its canning facility during the past few years and has plans for future expansion during the life of the next permit. The present permit was written against EPA's effluent guidelines for 210 tons of raw fish production per day. At the present time Star-Kist Samoa is typically operating above 300 tons/day and expects to be at 450 tons/day within the next twelve months, reaching perhaps 500 tons/day within the life of this permit renewal. Therefore, we would request that the renewed permit be based upon 500 tons/day of raw fish.

The increased production has required some changes in water handling within the cannery. Specifically a new fish meal reduction plant was recently completed with uses a considerable volume of sea water for scrubbing of meal dryer gases. As this flow is essentially a clean water flow having some elevation in temperature we would wish to discontinue sending this flow to the waste water treatment plant by creating a non-process water discharge as we have at our other facilities. This would be outfall 002 and would utilize an existing storm drain, which presently discharges runoff water from across the roadway adjacent to the cannery, and empties into Pago Pago Harbor under our dock. The



PERMIT ISSUANCE ROUTING SLIP

MODIFICATION ISSUANCE ROUTING SLIP

Drafted by: Madonna Narva Date: 1/21/87
Approved by: Kenneth D. Greenberg Date: 1/21/87
Kenneth D. Greenberg (W-5-1)
Chief, Permits and Pretreatment Sec.
Approved by: William H. Pierce (W-5) Date: 1/28/87
Chief, Permits & Compliance Branch
Approved by: Norm Lovelace Date: 2/2/87
Chief OTP (W-1-1)
Approved by: _____ Date: _____
Signed by: James E. Thompson Date: 2/3/87
Richard A. Coddington (W-1)
Acting, Director, Water Management Div.

Return to Patrick Chan (W-5-1) for mailing.

Applicant Name: Starkist Samoa, Inc.
Tuna Cannery Permit

NPDES No.: AS00000019

- Response to Comments
- Permit
- Fact Sheet

0108

December 19, 1984

coordinates of this new outfall 002 would be 14° 16' 37" South Latitude and 170° 41' 12" West Longitude. Also, retort cooling water, which is potable water used in cooling the cans after sterilization having an elevated temperature, we would wish to add this flow to outfall 002. At the present, much of the retort water is stored and used for cleanup of the plant, but the remainder unnecessarily dilutes the process waste at the waste water treatment plant. In addition, we would also request we be allowed to discharge boiler blowdown water through outfall 002.

A considerable volume of sea water pumped from the receiving waters is used in both the process and non-process functions within the cannery. Therefore, we would like to apply for net value credit for outfalls 001 and 002. The data contained under "intake" within section V of Form 2-C for both of these outfalls is based upon estimated values of the percentage of sea water used under average conditions compared to the total for each waste stream.

On September 2, 1982 Star-Kist Samoa, Inc. petitioned for modification to its NPDES permit in order to take advantage of a new rule effective July 6, 1982, (Federal Register June 4, 1982, PP 24534-24538) which would allow for facilities that continuously monitor effluent pH to be allowed to deviate from pH limitations up to 1% of the time during any calendar month as long as no single excursion was in excess of 60 minutes. We would request that this modification be made to our renewed permit.

If any further information is required in order to proceed with this permit renewal please do not hesitate to contact me or Jeff Naumann, Manager Environmental Engineering, at Star-Kist Foods (213) 548-4411 Ext. 6319.

Yours very truly,

STAR-KIST SAMOA, INC.



GREGORY L. DEERING
President & General Manager

/tsl

Attachments

cc: Mr. J. Naumann, Star-Kist Foods, Inc.

0241

Please print or type in the unshaded areas only.
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175

| FORM 1 GENERAL | | U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.) | | I. EPA I.D. NUMBER | |
|--|--|---|--|---|--|
| LABEL ITEMS | | PLEASE PLACE LABEL IN THIS SPACE | | GENERAL INSTRUCTIONS | |
| I. EPA I.D. NUMBER | | | | If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected. | |
| III. FACILITY NAME | | | | | |
| V. FACILITY MAILING ADDRESS | | | | | |
| VI. FACILITY LOCATION | | | | | |
| II. POLLUTANT CHARACTERISTICS | | | | | |
| INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column. If the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms. | | | | | |
| SPECIFIC QUESTIONS | | | SPECIFIC QUESTIONS | | |
| A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A) | | | B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B) | | |
| C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C) | | | D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D) | | |
| E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3) | | | F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4) | | |
| G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4) | | | H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4) | | |
| I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5) | | | J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5) | | |
| III. NAME OF FACILITY | | | | | |
| 1 SKIP S.T.A.R.-K.I.S.T. S.A.M.O.A., I.N.C. | | | | | |
| IV. FACILITY CONTACT | | | | | |
| A. NAME & TITLE (last, first, & title) | | | | | |
| 2 D.E.E.R.I.N.G., G.R.E.G.O.R.Y L. P.&G. M.G.R. | | | | | |
| B. PHONE (area code & no.) | | | | | |
| 6 8 4 6 3 3 1 6 5 2 | | | | | |
| V. FACILITY MAILING ADDRESS | | | | | |
| A. STREET OR P.O. BOX | | | | | |
| 3 P.O. BOX 368 | | | | | |
| B. CITY OR TOWN | | | | | |
| 4 P.A.G.O P.A.G.O, T.U.T.U.I.L.A I.S.L.A.N.D. | | | | | |
| C. STATE | | | | | |
| A.S. | | | | | |
| D. ZIP CODE | | | | | |
| 9 6 7 9 9 | | | | | |
| VI. FACILITY LOCATION | | | | | |
| A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER | | | | | |
| 5 V.I.L.L.A.G.E O.F A.N.U.A. | | | | | |
| B. COUNTY NAME | | | | | |
| M.A.U.P.U.T.A.S.I. | | | | | |
| C. CITY OR TOWN | | | | | |
| 6 V.I.L.L.A.G.E O.F A.N.U.A. | | | | | |
| D. STATE | | | | | |
| A.S. | | | | | |
| E. ZIP CODE | | | | | |
| 9 6 7 9 9 | | | | | |
| F. COUNTY CODE (if known) | | | | | |
| | | | | | |

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| A. FIRST 7 2 0 9 1 (specify) CANNED SEAFOOD PRODUCTION | | | | B. SECOND 7 2 0 4 7 (specify) CANNED PETFOOD PRODUCTION | | | |
| C. THIRD 7 2 0 4 8 (specify) FISH MEAL PRODUCTION | | | | D. FOURTH 7 (specify) SANITARY FOOD CAN MFG. | | | |

VIII. OPERATOR INFORMATION

| | | |
|--|--|---|
| A. NAME 8 STAR-KIST SAMOA, INC | | B. Is the name listed in Item VIII-A also the owner? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.) F = FEDERAL M = PUBLIC (other than federal or state) S = STATE O = OTHER (specify) P = PRIVATE P (specify) | | D. PHONE (area code & no.) 6 8 4 6 3 3 1 6 5 2 |

| | | | | | |
|--|--|---|-----------------|--------------------------|--|
| E. STREET OR P.O. BOX P O B O X 3 6 8 | | F. CITY OR TOWN P A G O P A G O, T U T U I L A I S L A N D | G. STATE A S | H. ZIP CODE 9 6 7 9 9 | IX. INDIAN LAND Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
|--|--|---|-----------------|--------------------------|--|

X. EXISTING ENVIRONMENTAL PERMITS

| | | | |
|---|--|---|--|
| A. NPDES (Discharges to Surface Water) 9 N A S 0 0 0 0 0 1 9 | | D. PSD (Air Emissions from Proposed Sources) 9 P | |
| B. UIC (Underground Injection of Fluids) 9 U | | E. OTHER (specify) O D 7 9 - 0 1 / 0 2 (specify) | |
| C. RCRA (Hazardous Wastes) 9 R | | E. OTHER (specify) (specify) | |

XI. MAP
Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)
CANNING OF TUNA AND PETFOOD, PRODUCTION OF FISH MEAL FROM FISH SCRAP AND MANUFACTURING OF SANITARY FOOD CANS FOR USE IN THE CANNERY.

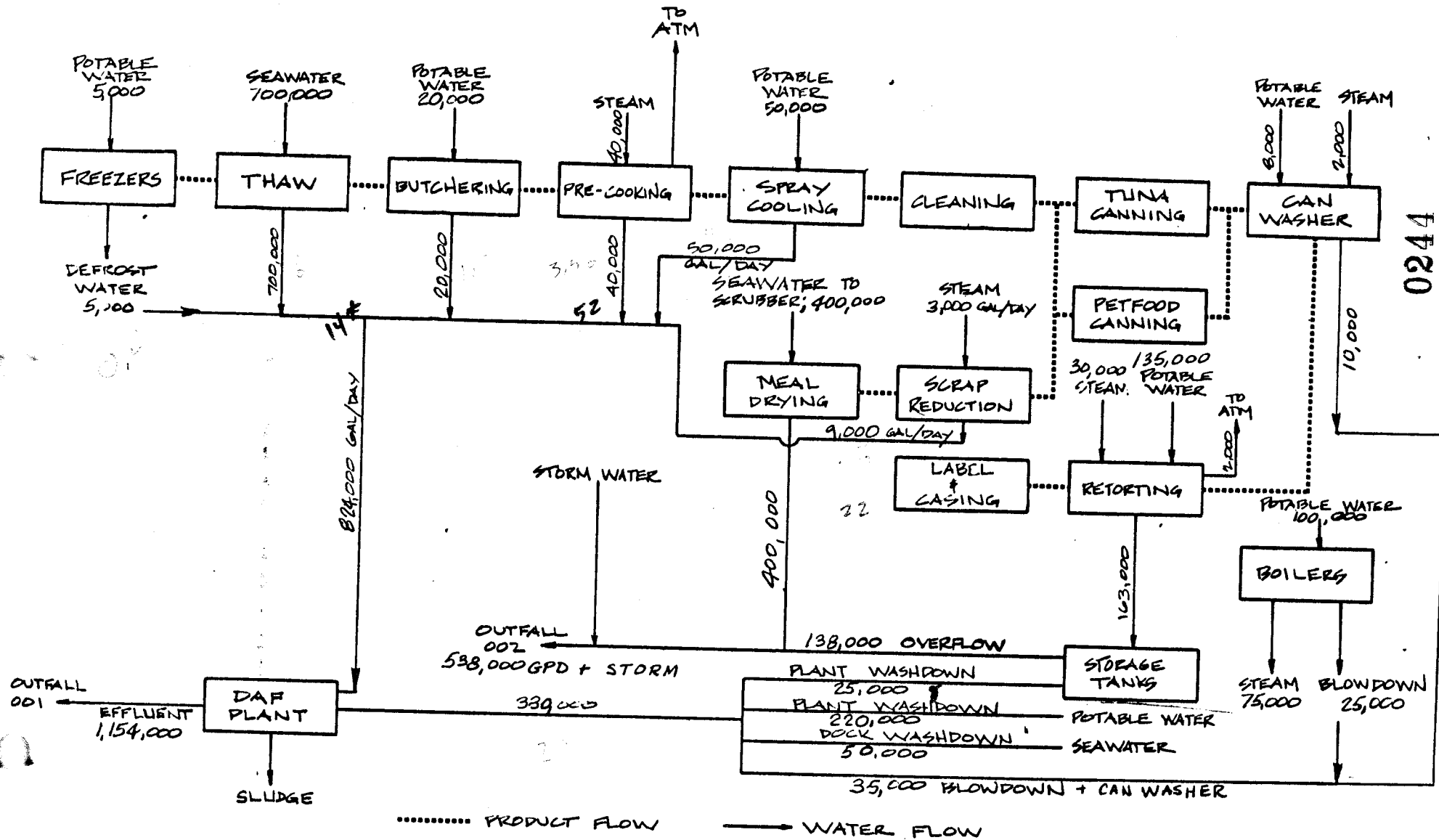
XIII. CERTIFICATION (see instructions)

| | | |
|---|--------------|----------------|
| I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. | | |
| A. NAME & OFFICIAL TITLE (Type or print) GREGORY L. DEERING President and General Manager | B. SIGNATURE | C. DATE SIGNED |

COMMENTS FOR OFFICIAL USE ONLY

| | |
|---|------|
| C | 0243 |
|---|------|

STAR-KIST SAMOA, INC.
WASTE WATER FLOWS

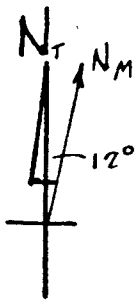


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% total P

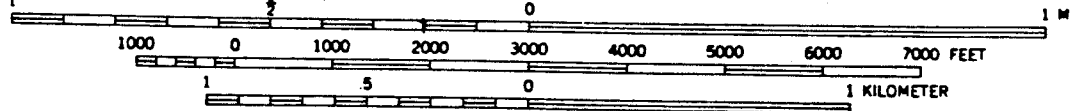
TUTUILA ISLAND

AMERICAN SAMOA



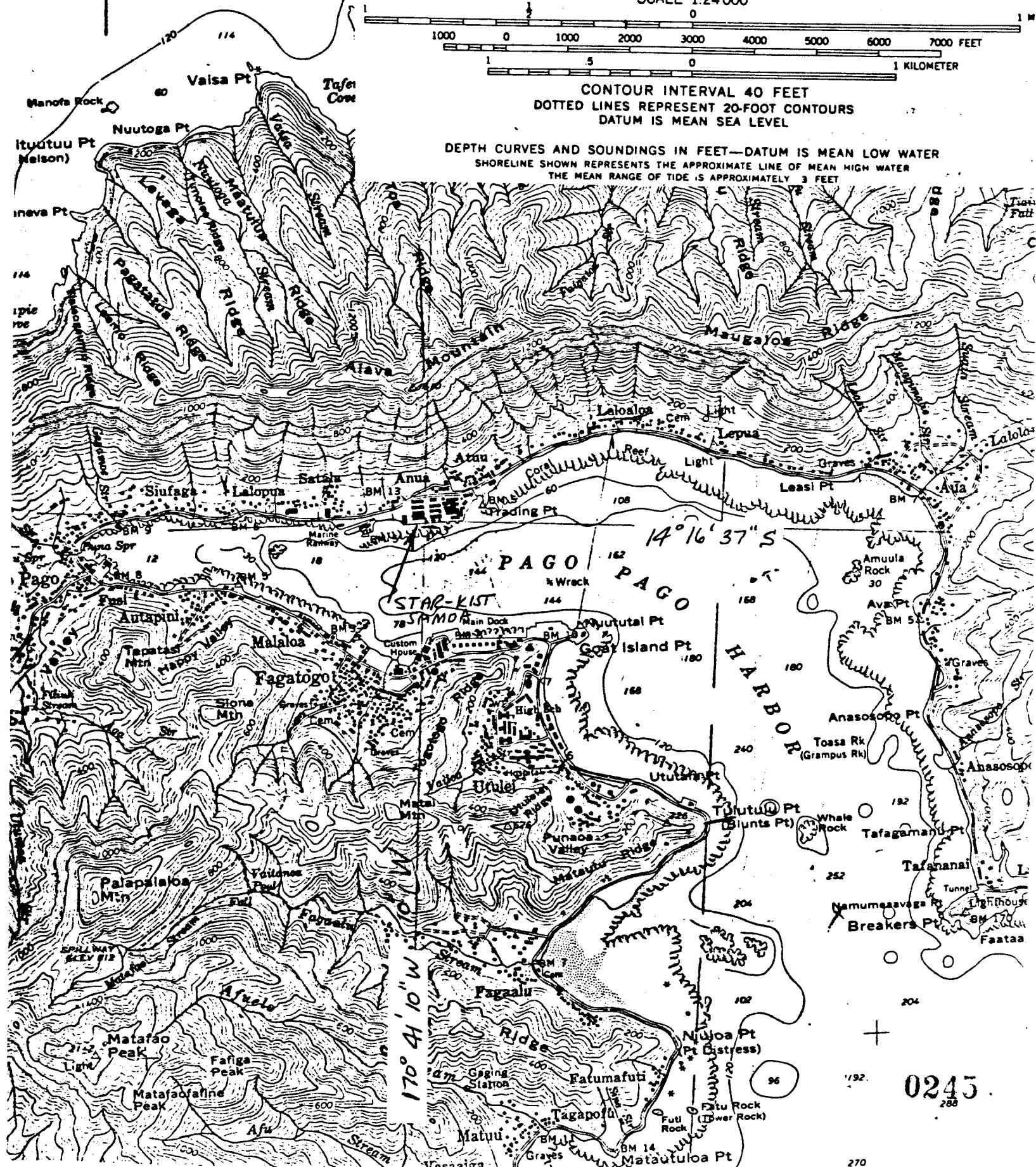
136

SCALE 1:24 000

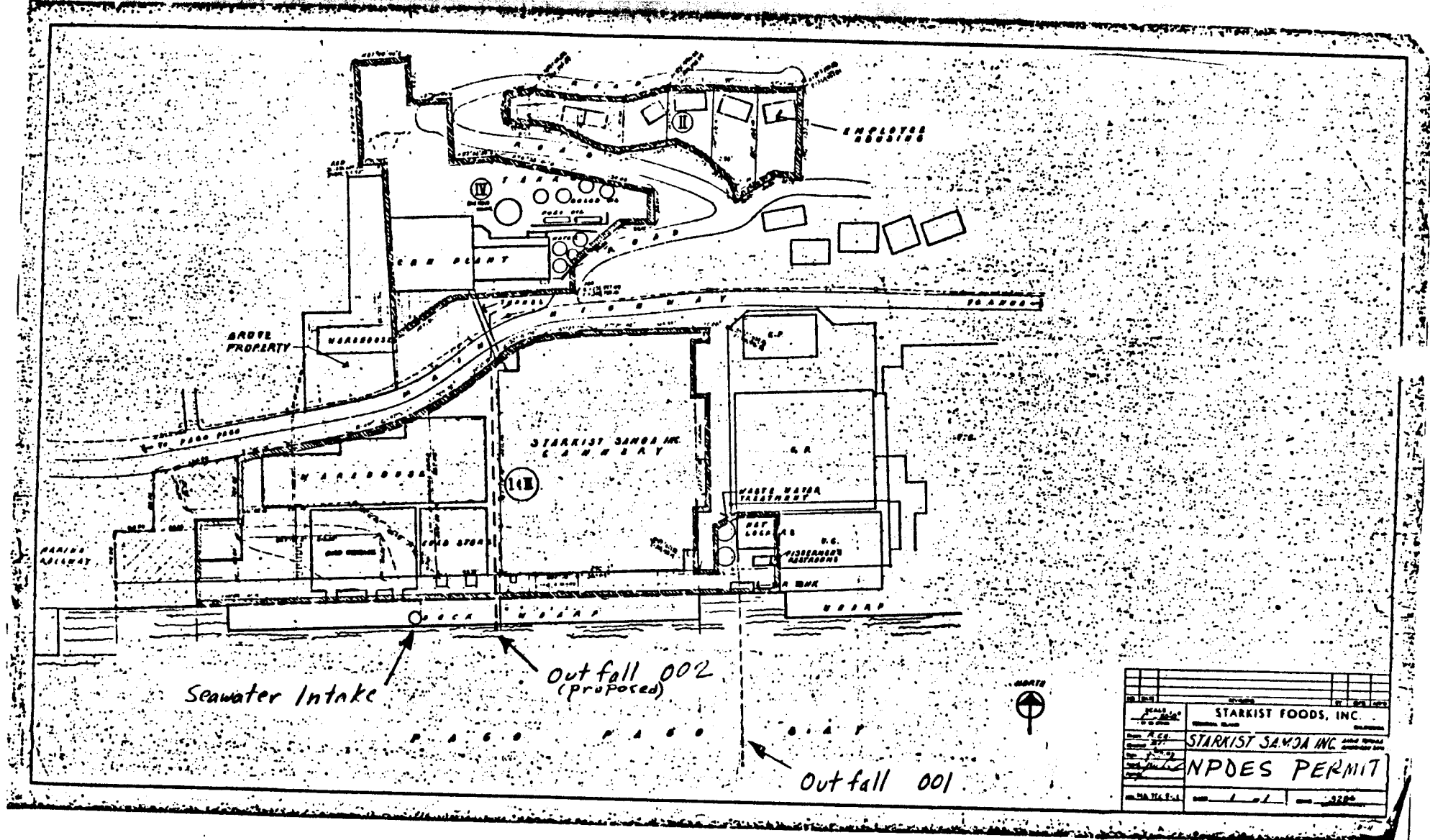


CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 20-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 3 FEET



0245



0245

NPDES



Form Approved OMB No. 158-R0173
U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

| A. OUTFALL NUMBER | B. LATITUDE | C. LONGITUDE | D. RECEIVING WATER |
|-------------------|---------------|------------------|--------------------|
| 1 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 2 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 3 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 4 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 5 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 6 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 7 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 8 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 9 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 10 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 11 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 12 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 13 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 14 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 15 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 16 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 17 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 18 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 19 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 20 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 21 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 22 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 23 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 24 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 25 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 26 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 27 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 28 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 29 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 30 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 31 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 32 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 33 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 34 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 35 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 36 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 37 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 38 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 39 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 40 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 41 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 42 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 43 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 44 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 45 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 46 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 47 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 48 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 49 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 50 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 51 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 52 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 53 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 54 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 55 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 56 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 57 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 58 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 59 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 60 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 61 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 62 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 63 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 64 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 65 | 33° 00' 00" N | 111° 30' 00" W | San Francisco Bay |
| 66 | 33° 00' 00" N | 111° 30' 00" W</ | |

| A. OUTFALL NUMBER (list) | B. LATITUDE | | | C. LONGITUDE | | | D. RECEIVING WATER (name) |
|--------------------------------|-------------|---------|---------|--------------|---------|---------|---------------------------|
| | 1. DEG. | 2. MIN. | 3. SEC. | 1. DEG. | 2. MIN. | 3. SEC. | |
| 001 | 14 | 16 | 37 | 170 | 41 | 10 | PAGO PAGO HARBOR |
| 002 | 14 | 16 | 37 | 170 | 41 | 12 | PAGO PAGO HARBOR |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

8. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

[illegible]

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?
☐ YES (complete the following table)
☒ NO (go to Section III)

| USE THE FOLLOWING TABLE | | | | | | | | | |
|--|--|---|---|--------------------------|---------------------|---|---------------------|-------------------------------|--|
| SEASONALITY OF FLOW | | | | | | | | | |
| <input checked="" type="checkbox"/> NO (go to Section III) | | | | | | | | | |
| 1. OUTFALL NUMBER (list) | 2. OPERATION(s) CONTRIBUTING FLOW (list) | 3. FREQUENCY | | 4. FLOW | | | | | |
| | | a. DAYS PER WEEK (specify average) | b. MONTHS PER YEAR (specify average) | a. FLOW RATE (in mgd) | | b. TOTAL VOLUME (specify with units) | | c. DUR- ATION (in days) | |
| | | | | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | | |
| | | | | | | | | | |
| III. MAXIMUM PRODUCTION | | | | | | | | | |

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
☒ YES (complete Item III-B)
☐ NO (to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?
☒ YES (complete Item III-C)
☐ NO (go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents an actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS (list outfall numbers) |
|---------------------|---------------------|--|---|
| a. QUANTITY PER DAY | b. UNITS OF MEASURE | c. OPERATION, PRODUCT, MATERIAL, ETC. (specify) | |
| 500 | TONS/DAY | RAW TUNA PROCESSING (THAW, COOK, CANNING) | 001 |

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of waste-water treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.
☒ YES (complete the following table)
☐ NO (go to Item IV-B)

| 1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COM- PLIANCE DATE | |
|--|----------------------|--------------------------|--|-------------------------------|-------------------|
| | a. NO. | b. SOURCE OF DISCHARGE | | a. RE- QUIRED | b. PRO- JECTED |
| MIXING ZONE | 001 | PROCESS WASTE- WATERS | OBTAIN MIXING ZONE IN ORDER TO MEET WATER QUALITY STANDARDS SET BY AMERICAN SAMOA GOVERNMENT | NONE | UNKNOWN |
| | | | 0248 | | |

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. ☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

CONTINUED FROM PAGE 2

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V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding — Complete one set of tables for each outfall — Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

| 1. POLLUTANT | 2. SOURCE | 1. POLLUTANT | 2. SOURCE |
|--------------|-----------|--------------|-----------|
| N.A. | | | |

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you do or expect that you will over the next 5 years use or manufacture as an intermediate or final product or byproduct?

☐ YES (list all such pollutants below)

☒ NO (go to Item VI-B)

N.A.

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharges of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐ YES (complete Item VI-C below)

☒ NO (go to Section VII)

C. If you answered "Yes" to Item VI-B, explain below and describe in detail the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years, to the best of your ability at this time. Continue on additional sheets if you need more space.

ALTHOUGH PRODUCTION IS NOT EXPECTED TO EXPAND TO "TWO TIMES" THE LEVEL OF THE RECENT PAST IT IS SCHEDULED TO EXPAND SUBSTANTIALLY, SO THAT THE DISCHARGE OF CONVENTIONAL POLLUTANTS WILL RISE ACCORDINGLY. THE TREATMENT PLANT HAS RECENTLY BEEN EXPANDED TO HANDLE THE FUTURE PRODUCTION EXPANSION

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VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES (identify the test(s) and describe their purposes below)

☒ NO (go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☐ NO (go to Section IX)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code & no.) | D. POLLUTANTS ANALYZED (list) |
|--------------------|---|-----------------------------------|----------------------------------|
| AECOS LABORATORIES | 970 N. KALAHEO AVE. SUITE A300 KAILUA, HAWAII 96734 | (808) 254-5884 | COD, COLOR, AMMONIA TOC |

IX. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)

GREGORY L. DEERING
President & General Manager

B. PHONE NO. (area code & no.)

(684)
633-1652

C. SIGNATURE

0250

D. DATE SIGNED

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

Form Approved OMB No. 158-R0173

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO
001

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | | | 3. UNITS (specify if blank) | | 4. INTAKE (optional) | | | |
|------------------------------------|------------------------|----------------|--|----------------|---|----------|-----------------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| a. Biochemical Oxygen Demand (BOD) | 4470 | 41,418 | | | 2343 | 20,350 | 12 | mg/l | lbs | 183 | 1145 | 1 |
| b. Chemical Oxygen Demand (COD) | 4400 | 42,370 | | | | | 6 | mg/l | lbs | 210 | 1314 | 1 |
| c. Total Organic Carbon (TOC) | 860 | 11,246 | | | | | 1 | mg/l | lbs | 1.7 | 11 | 1 |
| d. Total Suspended Solids (TSS) | 873 | 5257 | | | 155 | | 100 | mg/l | lbs | 38 | 238 | 1 |
| e. Ammonia (as N) | 298 | 3897 | | | | | 1 | mg/l | lbs | 0.555 | 3.5 | 1 |
| f. Flow | VALUE 1.568 | | VALUE 1.066 | | VALUE 0.899 | | 365 | | mgd | VALUE 0.75 | | 1 |
| g. Temperature (winter) | VALUE 33.3 | | VALUE 26.1 | | VALUE 25.4 | | 90 | °C | | VALUE 30.6 | | 1 |
| h. Temperature (summer) | VALUE 34.4 | | VALUE 28.9 | | VALUE 25.2 | | 90 | °C | | VALUE | | |
| i. pH | MINIMUM 6.0 | MAXIMUM 9.4 | MINIMUM 7.2 | MAXIMUM 8.0 | | | 100 | STANDARD UNITS | | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark details and requirements.

| 1. POLLUTANT AND CAS NO. (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|-------------|-----------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. PRESENT | b. ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| a. Bromide (24959-67-9) | | X | | | | | | | | | | | | |
| b. Chlorine, Total Residual | | X | | | | | | | | | | | | |
| c. Color | X | | 200 | N.A. | | | | | | | | | | |
| d. Fecal Coliform | | X | | | | | | | 1 | ALPHA UNITS | N.A. | 6 | N.A. | 1 |
| e. Fluoride (16984-48-8) | | X | | | | | | | | | | | | |
| f. Nitrate-Nitrite (as N) | | X | | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NO. (if available) | 2. MARK 'X' | | 3. EFFLUENT | | | | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|---|----------------------------------|-----------------------------------|------------------------|----------|---|----------|--|----------|----------------------------|------------------|---------|-------------------------------|----------|----------------------------|
| | a. RE- LEASED PPE SPENT | b. BY- PRODUCT AD- SPENT | 8. MAXIMUM DAILY VALUE | | 9. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANAL- YSES | e. CONCENTRATION | f. MASS | g. LONG TERM AVERAGE VALUE | | h. NO. OF ANAL- YSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| | | | | | | | | | | | | | | |
| g. Nitrogen, Total Organic (as N) | X | | 466 | 4028 | | | 249 | 2103 | 13 | mg/l | lbs | 14 | 88 | 1 |
| h. Oil and Grease | X | | 126 | 933 | 37 | 299 | 23 | 188 | 100 | mg/l | lbs | 1.2 | 7.5 | 1 |
| i. Phosphorus (as P), Total (7723-14-0) | X | | 76 | 707 | | | 48 | 411 | 12 | mg/l | lbs | 0.3 | 1.0 | 1 |
| j. Radioactivity | | | | | | | | | | | | | | |
| (1) Alpha, Total | | X | | | | | | | | | | | | |
| (2) Beta, Total | | X | | | | | | | | | | | | |
| (3) Radium, Total | | X | | | | | | | | | | | | |
| (4) Radium 226, Total | | X | | | | | | | | | | | | |
| k. Sulfate (as SO ₄) (14808-79-8) | | X | | | | | | | | | | | | |
| l. Sulfide (as S) | | X | | | | | | | | | | | | |
| m. Sulfite (as SO ₃) (14265-45-3) | | X | | | | | | | | | | | | |
| n. Surfactants | | X | | | | | | | | | | | | |
| o. Aluminum, Total (7429-90-5) | | X | | | | | | | | | | | | |
| p. Barium, Total (7440-39-3) | | X | | | | | | | | | | | | |
| q. Boron, Total (7440-42-8) | | X | | | | | | | | | | | | |
| r. Cobalt, Total (7440-48-4) | | X | | | | | | | | | | | | |
| s. Iron, Total (7439-89-6) | | X | | | | | | | | | | | | |
| t. Magnesium, Total (7439-95-4) | | X | | | | | | | | | | | | |
| u. Molybdenum, Total (7439-98-7) | | X | | | | | | | | | | | | |
| v. Manganese, Total (7439-96-5) | | X | | | | | | | | | | | | |
| w. Tin, Total (7440-31-5) | | X | | | | | | | | | | | | |
| x. Titanium, Total (7440-32-6) | | X | | | | | | | | | | | | |

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CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, non-process wastewater outfalls, and non-recovered GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | J. NO. OF ANALYSES | 4. UNITS | | 5. INTAKE (optional) | | |
|--|---------------------|--------------------|-------------------|------------------------|----------|--|----------|--|----------|--------------------|------------------|---------|----------------------------|----------|--------------------|
| | A. TESTING REQUIRED | B. DERIVED PRESENT | C. DERIVED ABSENT | 8. MAXIMUM DAILY VALUE | | D. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | | a. CONCENTRATION | b. MASS | I. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| METALS, CYANIDE, AND TOTAL PHENOLS | | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-0) | | | X | | | | | | | | | | | | |
| 2M. Arsenic, Total (7440-38-2) | | | X | | | | | | | | | | | | |
| 3M. Beryllium, Total, 7440-41-7) | | | X | | | | | | | | | | | | |
| 4M. Cadmium, Total (7440-43-9) | | | X | | | | | | | | | | | | |
| 5M. Chromium, Total (7440-47-3) | | | X | | | | | | | | | | | | |
| 6M. Copper, Total (7550-60-8) | | | X | | | | | | | | | | | | |
| 7M. Lead, Total (7439-97-6) | | | X | | | | | | | | | | | | |
| 8M. Mercury, Total (7439-97-6) | | | X | | | | | | | | | | | | |
| 9M. Nickel, Total (7440-02-0) | | | X | | | | | | | | | | | | |
| 10M. Selenium, Total (7782-49-2) | | | X | | | | | | | | | | | | |
| 11M. Silver, Total (7440-22-4) | | | X | | | | | | | | | | | | |
| 12M. Thallium, Total (7440-28-0) | | | X | | | | | | | | | | | | |
| 13M. Zinc, Total (7440-66-6) | | | X | | | | | | | | | | | | |
| 14M. Cyanide, Total (57-12-5) | | | X | | | | | | | | | | | | |
| 15M. Phenols, Total | | | X | | | | | | | | | | | | |
| DIOXIN | | | | | | | | | | | | | | | |
| 2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01 (1)) | | | X | DESCRIBE RESULTS | | | | | | | | | | | |

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OUTFALL 001

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | 5. INTAKE (optional) | | | | |
|---|---------------|-----------------|---------------|------------------------|----------|-------------------------|----------|-------------------------|----------|----------|----------------------|---------|----------------------------|----------|--------------------|
| | a. ANAL. LAB. | b. ANAL. METHOD | c. ANAL. DATE | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE | | c. LONG TERM AVG. VALUE | | | a. CONCENTRATION | b. MASS | b. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | | | | | | |
| 1V. Acrolein (107-02-8) | | | X | | | | | | | | | | | | |
| 2V. Acrylonitrile (107-13-1) | | | X | | | | | | | | | | | | |
| 3V. Benzene (71-43-2) | | | X | | | | | | | | | | | | |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | | | X | | | | | | | | | | | | |
| 5V. Bromoform (75-25-2) | | | X | | | | | | | | | | | | |
| 6V. Carbon Tetrachloride (56-23-5) | | | X | | | | | | | | | | | | |
| 7V. Chlorobenzene (108-90-7) | | | X | | | | | | | | | | | | |
| 8V. Chlorodibromomethane (124-48-1) | | | X | | | | | | | | | | | | |
| 9V. Chloroethane (75-00-3) | | | X | | | | | | | | | | | | |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | | | X | | | | | | | | | | | | |
| 11V. Chloroform (67-66-3) | | | X | | | | | | | | | | | | |
| 12V. Dichlorobromomethane (75-27-4) | | | X | | | | | | | | | | | | |
| 13V. Dichlorodifluoromethane (75-71-8) | | | X | | | | | | | | | | | | |
| 14V. 1,1-Dichloroethane (75-34-3) | | | X | | | | | | | | | | | | |
| 15V. 1,2-Dichloroethane (107-06-2) | | | X | | | | | | | | | | | | |
| 16V. 1,1-Dichloroethylene (75-35-4) | | | X | | | | | | | | | | | | |
| 17V. 1,2-Dichloropropane (78-87-5) | | | X | | | | | | | | | | | | |
| 18V. 1,2-Dichloropropylene (542-75-6) | | | X | | | | | | | | | | | | |
| 19V. Ethylbenzene (100-41-4) | | | X | | | | | | | | | | | | |
| 20V. Methyl Bromide (74-83-9) | | | X | | | | | | | | | | | | |
| 21V. Methyl Chloride (74-87-3) | | | X | | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. NO. OF ANAL- YSES | 4. UNITS | | 5. INTAKE (optional) | | |
|---|-------------------------------------|----------------------------------|----------------------------------|------------------------|----------|---|----------|---|----------|----------------------------|------------------|---------|-------------------------------|----------|----------------------------|
| | ANAL- YSIS RE- QUIR- ED | D. BE- LIEVED PRE- SENT | C. BE- LIEVED PRE- SENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANAL- YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | | | X | | | | | | | | | | | | |
| 23V. 1,1,2,2-Tetrachloroethane (79-34-5) | | | X | | | | | | | | | | | | |
| 24V. Tetrachloroethylene (127-18-4) | | | X | | | | | | | | | | | | |
| 25V. Toluene (108-88-3) | | | X | | | | | | | | | | | | |
| 26V. 1,2-Trans-Dichloroethylene (156-60-5) | | | X | | | | | | | | | | | | |
| 27V. 1,1,1-Trichloroethane (71-55-6) | | | X | | | | | | | | | | | | |
| 28V. 1,1,2-Trichloroethane (79-00-5) | | | X | | | | | | | | | | | | |
| 29V. Trichloroethylene (79-01-6) | | | X | | | | | | | | | | | | |
| 30V. Trichlorofluoromethane (75-69-4) | | | X | | | | | | | | | | | | |
| 31V. Vinyl Chloride (75-01-4) | | | X | | | | | | | | | | | | |
| GC/MS FRACTION - ACID COMPOUNDS | | | | | | | | | | | | | | | |
| 1A. 2-Chlorophenol (95-57-8) | | | X | | | | | | | | | | | | |
| 2A. 2,4-Dichlorophenol (120-83-2) | | | X | | | | | | | | | | | | |
| 3A. 2,4-Dimethylphenol (105-67-9) | | | X | | | | | | | | | | | | |
| 4A. 4,6-Dinitro-O-Cresol (534-52-1) | | | X | | | | | | | | | | | | |
| 5A. 2,4-Dinitrophenol (51-28-5) | | | X | | | | | | | | | | | | |
| 6A. 2-Nitrophenol (88-75-5) | | | X | | | | | | | | | | | | |
| 7A. 4-Nitrophenol (100-02-7) | | | X | | | | | | | | | | | | |
| 8A. P-Chloro-M-Cresol (59-50-7) | | | X | | | | | | | | | | | | |
| 9A. Pentachlorophenol (87-86-5) | | | X | | | | | | | | | | | | |
| 10A. Phenol (108-95-2) | | | X | | | | | | | | | | | | |
| 11A. 2,4,6-Trichlorophenol (100-00-0) | | | X | | | | | | | | | | | | |

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CONTINUED FROM THE FRONT

OUTFALL 001

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|------------------------------------|------------------------------------|---------------------------------|------------------------|----------|---|----------|---|----------|---------------------------|------------------|---------|-------------------------------|----------|----------------------------|----------------------|--|--|
| | a. TEST INC. OR OUT LD | b. DE- TERMINED PRE- SENT | c. RE- LEASED OR SPENT | B. MAXIMUM DAILY VALUE | | D. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | f. NO OF ANAL- YSES | a. CONCENTRATION | b. MASS | e. LONG TERM AVERAGE VALUE | | b. NO. OF ANAL- YSES | | | |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | | | X | | | | | | | | | | | | | | | |
| 2B. Acenaphthylene (208-96-8) | | | X | | | | | | | | | | | | | | | |
| 3B. Anthracene (120-12-7) | | | X | | | | | | | | | | | | | | | |
| 4B. Benzidine (92-87-5) | | | X | | | | | | | | | | | | | | | |
| 5B. Benzo (a) Anthracene (56-55-3) | | | X | | | | | | | | | | | | | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | | | X | | | | | | | | | | | | | | | |
| 7B. 3,4-Benzo-fluoranthene (205-99-2) | | | X | | | | | | | | | | | | | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | | | X | | | | | | | | | | | | | | | |
| 9B. Benzo (h) Fluoranthene (207-08-9) | | | X | | | | | | | | | | | | | | | |
| 10B. Bis (2-Chloro-ethoxy) Methane (111-91-1) | | | X | | | | | | | | | | | | | | | |
| 11B. Bis (2-Chloro-ethyl) Ether (111-44-4) | | | X | | | | | | | | | | | | | | | |
| 12B. Bis (2-Chloro-isopropyl) Ether (39638-32-9) | | | X | | | | | | | | | | | | | | | |
| 13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7) | | | X | | | | | | | | | | | | | | | |
| 14B. 4-Bromo-phenyl Phenyl Ether (101-55-3) | | | X | | | | | | | | | | | | | | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | | | X | | | | | | | | | | | | | | | |
| 16B. 2-Chloro-naphthalene (91-58-7) | | | X | | | | | | | | | | | | | | | |
| 17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3) | | | X | | | | | | | | | | | | | | | |
| 18B. Chrysene (218-01-9) | | | X | | | | | | | | | | | | | | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | | | X | | | | | | | | | | | | | | | |
| 20B. 1,2-Dichloro-benzene (95 50 1) | | | X | | | | | | | | | | | | | | | |
| 21B. 1,3-Dichloro-benzene (541-73-1) | | | X | | | | | | | | | | | | | | | |

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EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NUMBER

001

Form Approved OMB No. 158-R0173

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. NO. OF ANAL- YSES | 4. UNITS | | 5. INTAKE (optional) | | |
|---|--------------------------------------|---------------------------------|--------------------------------|------------------------|----------|---|----------|---|----------|----------------------------|------------------|---------|-------------------------------|----------|----------------------------|
| | A. TEST ING RE- QUIN- ED | B. RE- LIEVED PA- SENT | C. RE- LIEVED AS SENT | B. MAXIMUM DAILY VALUE | | D. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | | B. CONCENTRATION | D. MASS | B. LONG TERM AVERAGE VALUE | | D. NO. OF ANAL- YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| | | | | | | | | | | | | | | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22B. 1,4-Dichloro- benzene (106-46-7) | | | X | | | | | | | | | | | | |
| 23B. 3,3'-Dichloro- benzidine (91-94-1) | | | X | | | | | | | | | | | | |
| 24B. Diethyl Phthalate (84-66-2) | | | X | | | | | | | | | | | | |
| 25B. Dimethyl Phthalate (131-11-3) | | | X | | | | | | | | | | | | |
| 26B. Di-N-Butyl Phthalate (84-74-2) | | | X | | | | | | | | | | | | |
| 27B. 2,4-Dinitro- toluene (121-14-2) | | | X | | | | | | | | | | | | |
| 28B. 2,6-Dinitro- toluene (606-20-2) | | | X | | | | | | | | | | | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | | | X | | | | | | | | | | | | |
| 30B. 1,2-Diphenyl- hydrazine (as Azo- benzene) (122-66-7) | | | X | | | | | | | | | | | | |
| 31B. Fluoranthene (206-44-0) | | | X | | | | | | | | | | | | |
| 32B. Fluorene (86-73-7) | | | X | | | | | | | | | | | | |
| 33B. Hexa- chlorobenzene (118-71-1) | | | X | | | | | | | | | | | | |
| 34B. Hexa- chlorobutadiene (87-68-3) | | | X | | | | | | | | | | | | |
| 35B. Hexachloro- cyclopentadiene (77-47-4) | | | X | | | | | | | | | | | | |
| 36B. Hexachloro- ethane (67-72-1) | | | X | | | | | | | | | | | | |
| 37B. Indeno (1,2,3-cd) Pyrene (193-39-5) | | | X | | | | | | | | | | | | |
| 38B. Isophorone (78-59-1) | | | X | | | | | | | | | | | | |
| 39B. Naphthalene (91-20-3) | | | X | | | | | | | | | | | | |
| 40B. Nitrobenzene (98-95-3) | | | X | | | | | | | | | | | | |
| 41B. N-Nitro- sodimethylamine (62-75-9) | | | X | | | | | | | | | | | | |
| 42B. N-Nitrosodi- N-Propylamine (621-64-7) | | | X | | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|--|------------------------------------|-----------------------------|------------------------|----------|---|----------|---|----------|----------------------------|-----------------------|----------------------|-------------------------------|----------|----------------------------|
| | B. TOXIC INQ. RE- QUIR- ED | A. OR- GANO- PHOS- PHORUS | C. OR- GANO- CHLORINE | B. MAXIMUM DAILY VALUE | | D. MAXIMUM 30 DAY VALUE (if available) | | E. LONG TERM AVG. VALUE (if available) | | D. NO. OF ANAL- YSES | B. CONCEN- TRATION | D. MASS | F. LONG TERM AVERAGE VALUE | | D. NO. OF ANAL- YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 43B. N-Nitro-sodiphenylamine (86-30-6) | | | X | | | | | | | | | | | | |
| 44B. Phenanthrene (85-01-8) | | | X | | | | | | | | | | | | |
| 45B. Pyrene (129-00-0) | | | X | | | | | | | | | | | | |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | | | X | | | | | | | | | | | | |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | | | X | | | | | | | | | | | | |
| 2P. α -BHC (319-84-6) | | | X | | | | | | | | | | | | |
| 3P. β -BHC (319-85-7) | | | X | | | | | | | | | | | | |
| 4P. γ -BHC (58-89-9) | | | X | | | | | | | | | | | | |
| 5P. δ -BHC (319-86-8) | | | X | | | | | | | | | | | | |
| 6P. Chlordane (57-74-9) | | | X | | | | | | | | | | | | |
| 7P. 4,4'-DDT (50-29-3) | | | X | | | | | | | | | | | | |
| 8P. 4,4'-DDE (72-55-9) | | | X | | | | | | | | | | | | |
| 9P. 4,4'-DDD (72-54-8) | | | X | | | | | | | | | | | | |
| 10P. Dieldrin (60-57-1) | | | X | | | | | | | | | | | | |
| 11P. α -Endosulfan (115-29-7) | | | X | | | | | | | | | | | | |
| 12P. β -Endosulfan (115-29-7) | | | X | | | | | | | | | | | | |
| 13P. Endosulfan Sulfate (1031-07-8) | | | X | | | | | | | | | | | | |
| 14P. Endrin (72-20-8) | | | X | | | | | | | | | | | | |
| 15P. Endrin Aldehyde (7421-93-4) | | | X | | | | | | | | | | | | |
| 16P. Heptachlor (76-44-8) | | | X | | | | | | | | | | | | |

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CONTINUED FROM PAGE V-8

| | |
|--|----------------|
| EPA I.D. NUMBER (copy from Item 1 of Form I) | OUTFALL NUMBER |
| | 001 |

Form Approved OMB No. 158-R0173

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|--|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | A. TESTING REQUIRED | B. RECEIVED PRESENT | C. RECEIVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | B. CONCENTRATION | b. MASS | e. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | | | X | | | | | | | | | | | | |
| 18P. PCB-1242 (53469-21-9) | | | X | | | | | | | | | | | | |
| 19P. PCB-1254 (11097-69-1) | | | X | | | | | | | | | | | | |
| 20P. PCB-1221 (11104-28-2) | | | X | | | | | | | | | | | | |
| 21P. PCB-1232 (11141-16-5) | | | X | | | | | | | | | | | | |
| 22P. PCB-1248 (12672-29-6) | | | X | | | | | | | | | | | | |
| 23P. PCB-1260 (11096-82-5) | | | X | | | | | | | | | | | | |
| 24P. PCB-1016 (12674-11-2) | | | X | | | | | | | | | | | | |
| 25P. Toxaphene (8001-35-2) | | | X | | | | | | | | | | | | |

EPA Form 3510-2C (6-80)

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PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

Form Approved OMB No. 158-R0173

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO

002

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | | | | | 3. UNITS (specify if blank) | | 4. INTAKE (optional) | | |
|------------------------------------|------------------------|----------------|---|----------|---|----------|--------------------|----------------------------|--------------------------------|---------------|----------------------|---|--|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | D. NO. OF ANALYSES | E. LONG TERM AVERAGE VALUE | | | F. NO. OF ANALYSES | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | (1) CONCENTRATION | (2) MASS | | | | |
| a. Biochemical Oxygen Demand (BOD) | 193 | 875 | | | | | 1 | mg/l | lbs | 183 | 610 | 1 | |
| b. Chemical Oxygen Demand (COD) | 198 | 888 | | | | | 1 | mg/l | lbs | 210 | 710 | 1 | |
| c. Total Organic Carbon (TOC) | 3.1 | 26 | | | | | 1 | mg/l | lbs | 1.7 | 6 | 1 | |
| d. Total Suspended Solids (TSS) | 15 | 67 | | | | | 1 | mg/l | lbs | 38 | 127 | 1 | |
| e. Ammonia (as N) | 0.5 | 2.2 | | | | | 1 | mg/l | lbs | 0.555 | 1.9 | 1 | |
| f. Flow | VALUE 1.0 | | VALUE | | VALUE 0.538 | | 1 | | mgd | VALUE 0.4 | | 1 | |
| g. Temperature (winter) | VALUE 49 | | VALUE | | VALUE 32 | | 1 | °C | | VALUE 30.6 | | 1 | |
| h. Temperature (summer) | VALUE 49 | | VALUE | | VALUE 32 | | 1 | °C | | VALUE | | | |
| i. pH | MINIMUM 8.0 | MAXIMUM 6.5 | MINIMUM | MAXIMUM | | | 4 | STANDARD UNITS | | | | | |

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark details and requirements.

| 1. POLLUTANT AND CAS NO. (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|-------------|-----------|------------------------|----------|---|----------|---|----------|--------------------|----------------------------|----------|---|----------------------|---|--|
| | a. PRESENT | b. ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | D. NO. OF ANALYSES | E. LONG TERM AVERAGE VALUE | | | F. NO. OF ANALYSES | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | (1) CONCENTRATION | (2) MASS | | | | |
| a. Bromide (24959-67-9) | | X | | | | | | | | | | | | | |
| b. Chlorine, Total Residual | | X | | | | | | | | | | | | | |
| c. Color | X | | 6 | N.A. | | | | | 1 | ALPHA UNITS | N.A. | 6 | N.A. | 1 | |
| d. Fecal Coliform | | X | | | | | | | | | | | | | |
| e. Fluoride (16984-48-8) | | X | | | | | | | | | | | | | |
| f. Nitrate-Nitrite (as N) | | X | | | | | | | | | | | | | |

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ITEM V-B CONTINUED FROM FRONT

| 1. POLLUTANT AND CAS NO. (if available) | 2. MARK 'X' | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|----------------------------------|---------------------------------|------------------------|----------|---|----------|--|----------|----------------------------|------------------|----------------------|--------------------------------|----------|-----------------------------|
| | a. RE- LIEVED PRE- SENT | b. RE- LIEVED AD- JUST | 8. MAXIMUM DAILY VALUE | | 9. MAXIMUM 30 DAY VALUE (if available) | | 10. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANAL- YSES | 8. CONCENTRATION | b. MASS | 11. LONG TERM AVERAGE VALUE | | 12. NO. OF ANAL- YSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| g. Nitrogen, Total Organic (as N) | X | | 17.4 | 78 | | | | | 1 | mg/l | lbs | 14.0 | 47 | 1 |
| h. Oil and Grease | X | | 2.1 | 9.4 | | | | | 1 | mg/l | lbs | 1.2 | 4.0 | 1 |
| i. Phosphorus (as P), Total (7723-14-0) | X | | 17.1 | 76 | | | | | 1 | mg/l | lbs | 0.3 | 1.0 | 1 |
| j. Radioactivity | | | | | | | | | | | | | | |
| (1) Alpha, Total | | X | | | | | | | | | | | | |
| (2) Beta, Total | | X | | | | | | | | | | | | |
| (3) Radium, Total | | X | | | | | | | | | | | | |
| (4) Radium 226, Total | | X | | | | | | | | | | | | |
| k. Sulfate (as SO ₄) (14808-79-8) | | X | | | | | | | | | | | | |
| l. Sulfide (as S) | | X | | | | | | | | | | | | |
| m. Sulfite (as SO ₃) (14265-45-3) | | X | | | | | | | | | | | | |
| n. Surfactants | | X | | | | | | | | | | | | |
| o. Aluminum, Total (7429-90-5) | | X | | | | | | | | | | | | |
| p. Barium, Total (7440-39-3) | | X | | | | | | | | | | | | |
| q. Boron, Total (7440-42-8) | | X | | | | | | | | | | | | |
| r. Cobalt, Total (7440-48-4) | | X | | | | | | | | | | | | |
| s. Iron, Total (7439-89-6) | | X | | | | | | | | | | | | |
| t. Magnesium, Total (7439-95-4) | | X | | | | | | | | | | | | |
| u. Molybdenum, Total (7439-98-7) | | X | | | | | | | | | | | | |
| v. Manganese, Total (7439-96-5) | | X | | | | | | | | | | | | |
| w. Tin, Total (7440-31-5) | | X | | | | | | | | | | | | |
| x. Titanium, Total (7440-32-6) | | X | | | | | | | | | | | | |

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CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (*full seven pages*) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | 4. UNITS | 5. INTAKE (optional) | | | | | |
|---|------------------|-----------------|----------------------|------------------------|----------|--|----------|--|----------|----------|----------------------|------------------|---------|----------------------------|----------|--------------------|
| | TESTING REQUIRED | UNKNOWN PRESENT | CANNOT BE DETERMINED | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | | D. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | c. LONG TERM AVERAGE VALUE | | d. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | (1) CONCENTRATION | (2) MASS | |
| METALS, CYANIDE, AND TOTAL PHENOLS | | | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-0) | | | X | | | | | | | | | | | | | |
| 2M. Arsenic, Total (7440-38-2) | | | X | | | | | | | | | | | | | |
| 3M. Beryllium, Total, 7440-41-7) | | | X | | | | | | | | | | | | | |
| 4M. Cadmium, Total (7440-43-9) | | | X | | | | | | | | | | | | | |
| 5M. Chromium, Total (7440-47-3) | | | X | | | | | | | | | | | | | |
| 6M. Copper, Total (7550-50-8) | | | X | | | | | | | | | | | | | |
| 7M. Lead, Total (7439-97-6) | | | X | | | | | | | | | | | | | |
| 8M. Mercury, Total (7439-97-6) | | | X | | | | | | | | | | | | | |
| 9M. Nickel, Total (7440-02-0) | | | X | | | | | | | | | | | | | |
| 10M. Selenium, Total (7782-49-2) | | | X | | | | | | | | | | | | | |
| 11M. Silver, Total (7440-22-4) | | | X | | | | | | | | | | | | | |
| 12M. Thallium, Total (7440-28-0) | | | X | | | | | | | | | | | | | |
| 13M. Zinc, Total (7440-66-6) | | | X | | | | | | | | | | | | | |
| 14M. Cyanide, Total (57-12-5) | | | X | | | | | | | | | | | | | |
| 15M. Phenols, Total | | | X | | | | | | | | | | | | | |
| DIOXIN | | | | | | | | | | | | | | | | |
| 2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6) | | | X | DESCRIBE RESULTS | | | | | | | | | | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|-----------------------------------|------------------------|-----------------------|------------------------|----------|---|----------|---|----------|----------------------------|------------------|----------------------|-------------------------------|----------|----------------------------|
| | A. TEST INSTRUMENT QUANTITY | B. SAMPLE FREQUENCY | C. SAMPLE ANALYSIS | B. MAXIMUM DAILY VALUE | | D. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | D. NO. OF ANAL- YSES | a. CONCENTRATION | b. MASS | E. LONG TERM AVERAGE VALUE | | b. NO. OF ANAL- YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | | | | | | |
| 1V. Acrolein (107-02-8) | | | X | | | | | | | | | | | | |
| 2V. Acrylonitrile (107-13-1) | | | X | | | | | | | | | | | | |
| 3V. Benzene (71-43-2) | | | X | | | | | | | | | | | | |
| 4V. Bis (Chloro- methyl) Ether (542-88-1) | | | X | | | | | | | | | | | | |
| 5V. Bromoform (75-25-2) | | | X | | | | | | | | | | | | |
| 6V. Carbon Tetrachloride (56-23-5) | | | X | | | | | | | | | | | | |
| 7V. Chlorobenzene (108-90-7) | | | X | | | | | | | | | | | | |
| 8V. Chlorodi- bromomethane (124-48-1) | | | X | | | | | | | | | | | | |
| 9V. Chloroethane (75-00-3) | | | X | | | | | | | | | | | | |
| 10V. 2-Chloro- ethylvinyl Ether (110-75-8) | | | X | | | | | | | | | | | | |
| 11V. Chloroform (67-66-3) | | | X | | | | | | | | | | | | |
| 12V. Dichloro- bromomethane (75-27-4) | | | X | | | | | | | | | | | | |
| 13V. Dichloro- difluoromethane (75-71-8) | | | X | | | | | | | | | | | | |
| 14V. 1,1-Dichloro- ethane (75-34-3) | | | X | | | | | | | | | | | | |
| 15V. 1,2-Dichloro- ethane (107-06-2) | | | X | | | | | | | | | | | | |
| 16V. 1,1-Dichloro- ethylene (75-35-4) | | | X | | | | | | | | | | | | |
| 17V. 1,2-Dichloro- propane (78-87-5) | | | X | | | | | | | | | | | | |
| 18V. 1,2-Dichloro- propylene (542-75-6) | | | X | | | | | | | | | | | | |
| 19V. Ethylbenzene (100-41-4) | | | X | | | | | | | | | | | | |
| 20V. Methyl Bromide (74-83-9) | | | X | | | | | | | | | | | | |
| 21V. Methyl Chloride (74-87-3) | | | X | | | | | | | | | | | | |

CONTINUED FROM PAGE V-4

EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NUMBER

002

Form Approved OMB No. 158-R0173

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------|--------------------------|-----------------------|------------------------|----------|---|----------|---|----------|---------------------|-------------------|----------------------|----------------------------|----------|---------------------|
| | A. TEST INC. RE-QUIN-ED | B. DE-LIVERED P.Y. RE-NT | C. DE-LIVERED AD-SENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | D. NO. OF ANAL-YSES | A. CONCEN-TRATION | B. MASS | B. LONG TERM AVERAGE VALUE | | D. NO. OF ANAL-YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | | | X | | | | | | | | | | | | |
| 23V. 1,1,2,2-Tetrachloroethane (79-34-5) | | | X | | | | | | | | | | | | |
| 24V. Tetrachloroethylene (127-18-4) | | | X | | | | | | | | | | | | |
| 25V. Toluene (108-88-3) | | | X | | | | | | | | | | | | |
| 26V. 1,2-Trans-Dichloroethylene (156-60-5) | | | X | | | | | | | | | | | | |
| 27V. 1,1,1-Trichloroethane (71-55-6) | | | X | | | | | | | | | | | | |
| 28V. 1,1,2-Trichloroethane (79-00-5) | | | X | | | | | | | | | | | | |
| 29V. Trichloroethylene (79-01-6) | | | X | | | | | | | | | | | | |
| 30V. Trichlorofluoromethane (75-69-4) | | | X | | | | | | | | | | | | |
| 31V. Vinyl Chloride (75-01-4) | | | X | | | | | | | | | | | | |
| GC/MS FRACTION - ACID COMPOUNDS | | | | | | | | | | | | | | | |
| 1A. 2-Chlorophenol (95-57-8) | | | X | | | | | | | | | | | | |
| 2A. 2,4-Dichlorophenol (120-83-2) | | | X | | | | | | | | | | | | |
| 3A. 2,4-Dimethylphenol (106-67-9) | | | X | | | | | | | | | | | | |
| 4A. 4,6-Dinitro-O-Cresol (534-52-1) | | | X | | | | | | | | | | | | |
| 5A. 2,4-Dinitrophenol (51-28-5) | | | X | | | | | | | | | | | | |
| 6A. 2-Nitrophenol (88-75-5) | | | X | | | | | | | | | | | | |
| 7A. 4-Nitrophenol (100-02-7) | | | X | | | | | | | | | | | | |
| 8A. P-Chloro-M-Cresol (59-50-7) | | | X | | | | | | | | | | | | |
| 9A. Pentachlorophenol (87-86-5) | | | X | | | | | | | | | | | | |
| 10A. Phenol (108-95-2) | | | X | | | | | | | | | | | | |
| 11A. 2,4,6-Trichlorophenol (50-67-0) | | | X | | | | | | | | | | | | |

0267

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|---------------------------|--------------------------|--------------------------|------------------------|----------|---|----------|---|----------|----------------------|------------------|----------|----------------------------|----------------------|----------------------|--|
| | A. TEST INC. OR QUIN. LU. | B. DE- LIVERED PRE- CENT | C. DE- LIVERED AS- SPENT | 8. MAXIMUM DAILY VALUE | | 9. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | D. NO. OF ANAL- YSES | 8. CONCENTRATION | D. MASS | 8. LONG TERM AVERAGE VALUE | | D. NO. OF ANAL- YSES | |
| | | | | (1) CONCENTRATION | (1) MASS | (1) CONCENTRATION | (1) MASS | (1) CONCENTRATION | (1) MASS | | | | (1) CONCENTRATION | (1) MASS | | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | | |
| 18. Acenaphthene (83-32-9) | | | X | | | | | | | | | | | | | |
| 28. Acenaphthylene (208-96-8) | | | X | | | | | | | | | | | | | |
| 38. Anthracene (120-12-7) | | | X | | | | | | | | | | | | | |
| 48. Benzidine (92-87-5) | | | X | | | | | | | | | | | | | |
| 58. Benzo (a) Anthracene (56-55-3) | | | X | | | | | | | | | | | | | |
| 68. Benzo (a) Pyrene (50-32-8) | | | X | | | | | | | | | | | | | |
| 78. 3,4-Benzo-fluoranthene (205-99-2) | | | X | | | | | | | | | | | | | |
| 88. Benzo (ghi) Perylene (191-24-2) | | | X | | | | | | | | | | | | | |
| 98. Benzo (k) Fluoranthene (207-08-9) | | | X | | | | | | | | | | | | | |
| 108. Bis (2-Chloro-ethoxy) Methane (111-91-1) | | | X | | | | | | | | | | | | | |
| 118. Bis (2-Chloro-ethyl) Ether (111-44-4) | | | X | | | | | | | | | | | | | |
| 128. Bis (2-Chloro-isopropyl) Ether (39638-32-9) | | | X | | | | | | | | | | | | | |
| 138. Bis (2-Ethyl-hexyl) Phthalate (117-81-7) | | | X | | | | | | | | | | | | | |
| 148. 4-Bromo-phenyl Phenyl Ether (101-55-3) | | | X | | | | | | | | | | | | | |
| 158. Butyl Benzyl Phthalate (85-68-7) | | | X | | | | | | | | | | | | | |
| 168. 2-Chloro-naphthalene (91-58-7) | | | X | | | | | | | | | | | | | |
| 178. 4-Chloro-phenyl Phenyl Ether (7005-72-3) | | | X | | | | | | | | | | | | | |
| 188. Chrysene (218-01-9) | | | X | | | | | | | | | | | | | |
| 198. Dibenzo (a,h) Anthracene (53-70-3) | | | X | | | | | | | | | | | | | |
| 208. 1,2-Dichloro-benzene (95-50-1) | | | X | | | | | | | | | | | | | |
| 218. 1,3-Dichloro-benzene (541-73-1) | | | X | | | | | | | | | | | | | |

CONTINUED FROM PAGE V-6

EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NUMBER

002

Form Approved OMB No. 158-R0173

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|------------------------------------|--------------------------------|--------------------------------|------------------------|----------|---|----------|---|----------|-------------------------|------------------|----------------------|----------------------------|----------|-------------------------|
| | A. TESTING REQUIRED QUIN- LM | B. BL- LEVEL PML SENT | C. BL- LEVEL PML SENT | B. MAXIMUM DAILY VALUE | | D. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | I. NO. OF ANAL- YSES | B. CONCENTRATION | D. MASS | B. LONG TERM AVERAGE VALUE | | I. NO. OF ANAL- YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22B. 1,4-Dichlorobenzene (106-46-7) | | | X | | | | | | | | | | | | |
| 23B. 3,3'-Dichlorobenzidine (91-94-1) | | | X | | | | | | | | | | | | |
| 24B. Diethyl Phthalate (84-66-2) | | | X | | | | | | | | | | | | |
| 25B. Dimethyl Phthalate (131-11-3) | | | X | | | | | | | | | | | | |
| 26B. Di-N-Butyl Phthalate (84-74-2) | | | X | | | | | | | | | | | | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | | | X | | | | | | | | | | | | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | | | X | | | | | | | | | | | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | | | X | | | | | | | | | | | | |
| 30B. 1,2-Diphenylhydrazine (as Azo-benzene) (122-66-7) | | | X | | | | | | | | | | | | |
| 31B. Fluoranthene (206-44-0) | | | X | | | | | | | | | | | | |
| 32B. Fluorene (86-73-7) | | | X | | | | | | | | | | | | |
| 33B. Hexachlorobenzene (118-71-1) | | | X | | | | | | | | | | | | |
| 34B. Hexachlorobutadiene (87-68-3) | | | X | | | | | | | | | | | | |
| 35B. Hexachlorocyclopentadiene (77-47-4) | | | X | | | | | | | | | | | | |
| 36B. Hexachloroethane (67-72-1) | | | X | | | | | | | | | | | | |
| 37B. Indeno (1,2,3-cd) Pyrene (193-39-5) | | | X | | | | | | | | | | | | |
| 38B. Isophorone (78-59-1) | | | X | | | | | | | | | | | | |
| 39B. Naphthalene (91-20-3) | | | X | | | | | | | | | | | | |
| 40B. Nitrobenzene (98-95-3) | | | X | | | | | | | | | | | | |
| 41B. N-Nitrosodimethylamine (62-75-9) | | | X | | | | | | | | | | | | |
| 42B. N-Nitrosodi-N-Propylamine (621-64-7) | | | X | | | | | | | | | | | | |

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| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|---------------------------------------|---|--|------------------------|----------|---|----------|---|----------|-----------------------------|-----------------------|----------------------|-------------------------------|----------|----------------------------|
| | 8. TEST INC. RE- QUIR- ED | 9. DE- CLAS- SIFIED POT- ENTIAL | 10. DE- CLAS- SIFIED AS SENT | 8. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | 11. NO. OF ANAL- YSES | b. CONCEN- TRATION | d. MASS | 8. LONG TERM AVERAGE VALUE | | d. NO. OF ANAL- YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 43B. N-Nitro- sodiphenylamine (86-30-6) | | | X | | | | | | | | | | | | |
| 44B. Phenanthrene (85-01-8) | | | X | | | | | | | | | | | | |
| 45B. Pyrene (129-00-0) | | | X | | | | | | | | | | | | |
| 46B. 1,2,4- Tri- chlorobenzene (120-82-1) | | | X | | | | | | | | | | | | |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | | | X | | | | | | | | | | | | |
| 2P. α -BHC (319-84-6) | | | X | | | | | | | | | | | | |
| 3P. β -BHC (319-85-7) | | | X | | | | | | | | | | | | |
| 4P. γ -BHC (58-89-9) | | | X | | | | | | | | | | | | |
| 5P. δ -BHC (319-86-8) | | | X | | | | | | | | | | | | |
| 6P. Chlordane (57-74-9) | | | X | | | | | | | | | | | | |
| 7P. 4,4'-DDT (50-29-3) | | | X | | | | | | | | | | | | |
| 8P. 4,4'-DDE (72-55-9) | | | X | | | | | | | | | | | | |
| 9P. 4,4'-DDD (72-54-8) | | | X | | | | | | | | | | | | |
| 10P. Dieldrin (60-57-1) | | | X | | | | | | | | | | | | |
| 11P. α -Endosulfan (115-29-7) | | | X | | | | | | | | | | | | |
| 12P. β -Endosulfan (115-29-7) | | | X | | | | | | | | | | | | |
| 13P. Endosulfan Sulfate (1031-07-8) | | | X | | | | | | | | | | | | |
| 14P. Endrin (72-20-8) | | | X | | | | | | | | | | | | |
| 15P. Endrin Aldehyde (7421-93-4) | | | X | | | | | | | | | | | | |
| 16P. Heptachlor (76-44-8) | | | X | | | | | | | | | | | | |

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CONTINUED FROM PAGE V-8

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|---------------------|---------------------|------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED AS PRESENT | b. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | | | X | | | | | | | | | | | | |
| 18P. PCB-1242 (53469-21-9) | | | X | | | | | | | | | | | | |
| 19P. PCB-1254 (11097-69-1) | | | X | | | | | | | | | | | | |
| 20P. PCB-1221 (11104-28-2) | | | X | | | | | | | | | | | | |
| 21P. PCB-1232 (11141-16-5) | | | X | | | | | | | | | | | | |
| 22P. PCB-1248 (12672-29-6) | | | X | | | | | | | | | | | | |
| 23P. PCB-1260 (11096-82-5) | | | X | | | | | | | | | | | | |
| 24P. PCB-1016 (12674-11-2) | | | X | | | | | | | | | | | | |
| 25P. Toxaphene (8001-35-2) | | | X | | | | | | | | | | | | |

0268



Star-Kist SAMOA, Inc.



P.O. Box 368 • Pago Pago • TUTUILA ISLAND • AMERICAN SAMOA

October 5, 1984 74 OCT 17 10:25

Norman L. Lovelace
Office of Territorial Programs
Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, California 94105

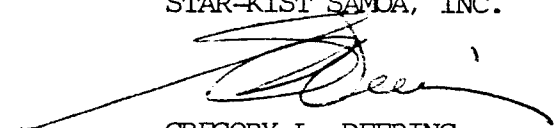
Subject: NPDES PERMIT RENEWAL STAR-KIST SAMOA AS0000019

Dear Mr. Lovelace:

Star-Kist Samoa is scheduled to renew their NPDES Permit at this time as the present permit expires on March 31, 1985. We will require additional sampling and analyses, some of which must be done off-island as a qualified contract laboratory is not available in American Samoa. We would, therefore, request that we be given an additional period of thirty days in order to submit the consolidated application form. If this delay in permit application presents any problem please feel free to call myself at (684) 633-1652 or Jeffrey Naumann, Manager Environmental Engineering, at (213) 548-4411 Ext. 6319.

Very truly yours,

STAR-KIST SAMOA, INC.



GREGORY L. DEERING
General Manager

/tsl

Copy to:
Jeff Naumann

0269



Star-Kist Foods, Inc.

582 TUNA STREET
TERMINAL ISLAND, CALIFORNIA 90731
(213) 548-4411

Davey

November 28, 1984

Norman L. Lovelace
Office of Territorial Programs
Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, CA 94105

Subject: NPDES Permit Renewal, Star-Kist Samoa AS0000019

Dear Mr. Lovelace:

In our previous letter to you dated October 5, 1984, Star-Kist Samoa indicated that we would be late in submission of the renewal application that was due on October 4, 1984, and hope to have the information complete and received by you by the 4th of November. We are still being delayed by not having received the complete laboratory analyses from our contract laboratory in Honolulu. They have indicated to us that their TOC testing apparatus is not functioning and that our samples would have to be sent to the mainland for completion. We hope to receive all of the results soon and if they are not forthcoming we will submit the partially completed consolidated application forms within the next two weeks. We must apologize for the delay and hope that it will not present any problems in renewal of the permit. Please call me at (213) 548-4411 Ext. 6319, if you wish us to proceed in a different manner.

Sincerely,

Jeffrey R. Naumann
Manager Environmental Engineering

JRN/le

cc: Greg Deering
Mark Anthony
Dave Ballands

0270